TEXTILE BULLETIN

Vol. 51 SEPTEMBER 17, 1936 No. 3

FLEXELIN

FLEXELIN
USED THE WORLD OVER

DEFINITE RESULTS FROM A UNIQUE STRONG FLEXIBLE FILM

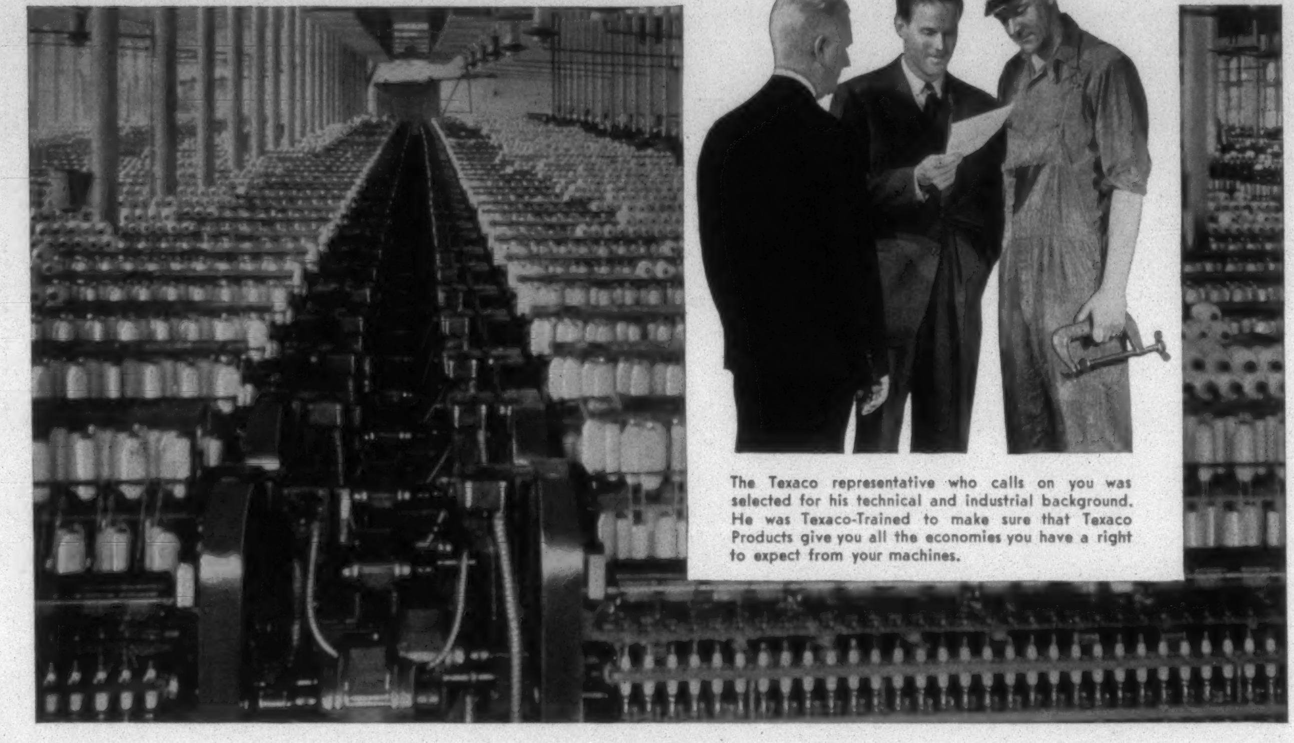
A POWERFUL BINDER WHICH
INCREASES
STRENGTH FLEXIBILITY
PRODUCTION

W. A. SCHOLTEN'S CHEMISCHE FABRIEKEN
GRONINGEN, HOLLAND

SOUTHERN REPRESENTATIVE
H. D. MEINCKE, 814 COMMERCIAL BANK BLDG., CHARLOTTE, N. C.

INSTITUTE FOR RESEARCH OCT 37
IN SOCIAL SERVICE 1451 G R
UNIVERSITY OF N C BOX 711
CHAPEL HILL N C

TEXACO-TRAINED



The Texaco representative who calls on you was selected for his technical and industrial background. He was Texaco-Trained to make sure that Texaco Products give you all the economies you have a right to expect from your machines.

When he says

"You can reduce your power consumption.."

he speaks from experience

BEFORE he takes your order, he is Texaco-Trained to make sure of the results he promises.

He is Texaco-Trained to furnish a study of the operating conditions in your mill—including bearing temperatures, spindle speeds, whether old or new equipment, and its mechanical condition. Because of his extensive field and engineering background he can make it plain just WHY spindle lubrication in your plant can be improved . . . how power consumption and wear can be reduced all along the line.

Whenever he points out possible maintenance economies—from your bale breaker to packaging equipment—you can rely on his seasoned judgment and the products he recommends to put them into effect.

And he follows through. He checks back, month after month, on the performance you get. He aids you in constantly improving it.

A Texaco-Trained representative will be glad to provide practical engineering service, to prove the economies of Texaco Products.

THE TEXAS COMPANY
135 East 42nd St., New York City

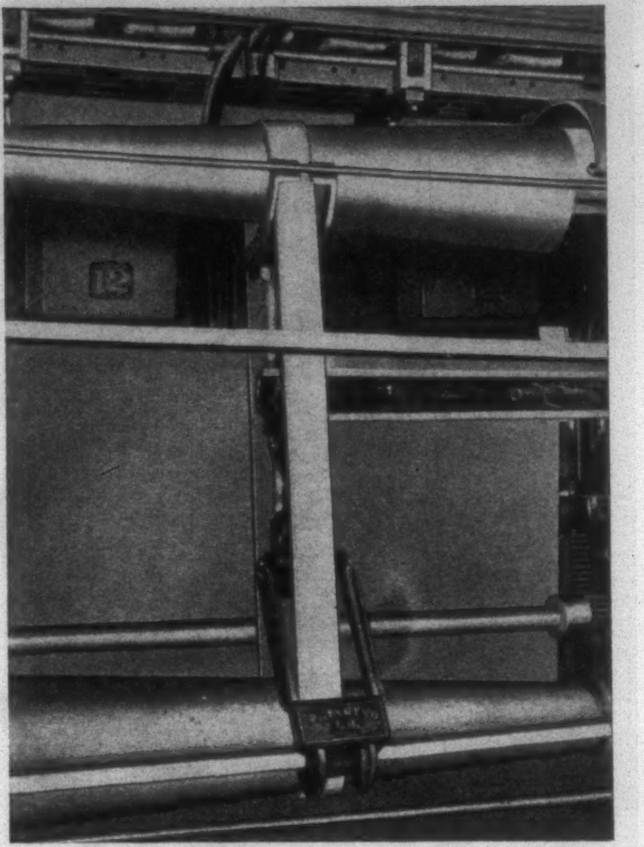
Nation-wide distribution facilities assure prompt delivery

TEXACO *Industrial Lubricants*

PUBLISHED EVERY THURSDAY BY CLARK PUBLISHING COMPANY, 118 WEST FOURTH STREET, CHARLOTTE, N. C. SUBSCRIPTION $2.00 PEAR YEAR IN ADVANCE. ENTERED AS SECOND CLASS MAIL MATTER MARCH 2, 1911, AT POSTOFFICE, CHARLOTTE, N. C., UNDER ACT OF CONGRESS, MARCH 2, 1897.

SHIFT TO GILMER . . .

. . . and you'll end your cone belt troubles



THE fame of Gilmer Cone Belts has been spreading. Perhaps you have heard some of the same enthusiastic reports that keep coming in to us. And it is a fact that Gilmer Cone Belts are the recognized leader in the textile field. We believe you'll be interested in knowing more about them.

The Gilmer Cone Belt is especially designed for shifter service—to put an end to all the troubles and expense that used to seem unavoidable. The edges of the belt are highly wear-resisting. What little wear does take place is uniformly even and there are no ravellings to interfere with proper cone operation.

These belts are almost stretch-proof, due to the Gilmer method of endless construction with cords and fabric. Slippage is minimized, and the driven cone keeps right in step with the driving cone.

Here are the simple facts—not empty claims, but the actual experience of users—other belts may look like Gilmer, but there the similarity ends. The Gilmer Cone Belt shows its difference in *results*. In short, you'll end your cone belt troubles if you shift to Gilmer. Call your distributor, or write us.

L. H. GILMER COMPANY, Tacony, Philadelphia

Gilmer BELTS

GILMER KABLE KORD BELTS

. . . grip like a vise on flat pulleys. The pressure of the contactor element of Kable Kord upon the pulling cords holds them snugly and securely against the pulley at all times. Kable Kord is more flexible, reduces slippage, has minimum stretch, more pull per square inch and longer wear.

GILMER V-BELTS

. . . perform as efficiently on V-drives as does Kable Kord on flat pulleys. Ruggedly constructed of three compositions of tough, flexible, heat-resisting rubber, and the finest cords and fabric money can buy. Gilmer V's transmit maximum power even under stress of high speeds and heavy over-loads.

Manufacturers of COMPLETE LINE OF POWER BELTING

V-Belts • Kable Kord Roll and Endless Flat Belting • Planer Belts • Speedage Endless Fabric Belts • Cone Belts • Roving Frame Belts • Moulded Rubber Belts • Winder Belts • Spinner Belts • Refrigerator and Washing Machine Belts • Conveyor Belts • Round Roll and Endless Fabric Belting • Endless Belting • Endless Cotton Belts • Laundry Feed Ribbons

SPECIALISTS IN QUALITY BELTS SINCE 1903

INDANTHREN

INDANTHREN
IS THE GDC NAME
FOR THE LEADING
FAST TO LIGHT, VAT DYESTUFFS

GDC

GENERAL DYESTUFF CORPORATION

ELIMINATING INTERNAL COMPETITION

10 WINDERS IN PLACE OF 18

The ten Model 102 Foster Cone Winders in this modernized winding room have replaced eighteen obsolete models.

The Foster Model 102 increases production about 100 per cent and reduces labor cost about 1/3 as compared with older type machines. It also produces better cones; that is, the lay of yarn and taper conform to the latest standards, and density is both uniform and most suitable for knitting.

This machine handles all counts and qualities equally well,—colored yarns as well as natural.

Can you match this performance in your winding room? If not, don't blame external competition for loss of profits. Blame INTERNAL competition or obsolete machinery and take steps to eliminate it by writing us for full particulars about the Model 102.

FOSTER MACHINE CO.
Westfield, Mass.

FOSTER
MODEL 102
Standard for the Knitting Trade

MORE THAN 1,300,000 ACTIVE SPINDLES

OPERATING ON CARDED BROADCLOTH AND PRINT CLOTH YARNS ARE EQUIPPED WITH ARMSTRONG'S CORK COTS

FOR spinning any type of yarn, Armstrong's Seamless Cork Cots offer important advantages. And the total spindlage now operating on cork in the various branches of the industry *prove* it! In mills spinning yarn for print cloth and carded broadcloth for example, there are 1,371,602 active spindles equipped with Armstrong's Seamless Cork Cots.

The initial cost of these cots is no more than other types of roll covering, and they offer valuable savings—in low cost assembling, longer life, fewer roll changes, a stronger, more uniform yarn. Mills report that Armstrong's Seamless Cork Cots *cut roll costs 50%* and more.

Let an Armstrong representative show you detailed figures of spindles on cork in mills spinning *your* range of numbers . . . tell you the whole story about Armstrong's new *Extra Cushion* Cork Cot which brings you added benefits. Write Armstrong Cork Products Co., Textile Div., 921 Arch St., Lancaster, Pa.

FOR SPINNING AND CARDROOM ROLLS

ARMSTRONG'S EXTRA CUSHION SEAMLESS CORK COTS

ARMSTRONG HAS MADE CORK PRODUCTS SINCE 1860

◄ TEXTILE BULLETIN ►

Vol. 51 September 17, 1936 No. 3

Business in Cotton Goods Shows Tremendous Gains

Crop Report Followed by New Wave of Buying

AN enormous volume of buying in cotton goods that followed publication of the Government cotton crop has enabled mills to book solidly ahead through the remainder of the year. Many of them refused to take business past December, although some have accepted large orders for deliveries in January and February.

Print cloth business, as is usual, has led the large sales, but buying spread to other divisions of market and covered a wider range of fabrics than has been the case for some time.

Market reports estimated that sales of print cloths for the first eight days in September were larger than production for a full month, business handled being in excess of one hundred million yards. Prices were advanced on an average of an eighth to three-eighths cent a yard on most standard gray goods constructions. Buyers did not hesitate to pay the higher prices and in the market both producers and sellers are apparently bullish over the price outlook.

Gray goods mills, which had an excellent business in July, have again built up a very substantial backlog of orders, and with stocks at a low point, there is nothing in sight to indicate that they will not continue in their present strong position for some time to come. Profits margins have increased and with the general improvement in business in almost all lines, it now appears that the mills are facing the brightest outlook they have known since the depression began.

In addition to the current large business, announcement from Government agencies that they will be in the market for very large supplies of cotton goods during the next month, is lending additional strength to the situation. The army is to purchase several million yards of cotton cloth and large quantities of cotton underwear. With the mill so strongly sold ahead, it is doubtful if a very large number of them will be interested in bidding for government business, but it will give some mills who have not sold so heavily a chance to fill in with a good volume of business.

Business has not been confined to gray goods. Colored goods have sold in large volume and prices have advanced as much as a half-cent a yard. Further advances are expected as buyers are apparently anxious to cover a good part of their needs at current prices. Denims and chambrays have been particularly good sellers and mills on these fabrics are well sold for some time to come.

Fine goods business has not reached a proportionate activity with sales of coarser constructions, but trading has shown a good increase in the past ten days.

The demand for viscose rayon yarns has continued very strong and statistics released by the *Textile Organon* show that deliveries made during August set a new all-time record. Stocks now in the hands of producing companies are so low that in many cases mills are not finding possible to get adequate supplies.

For the first time in a long while the yarn market has definitely become a selers' market. In general the mills are regarded as having a larger business and better prospects than at any time since the war days.

The current market news is not enly encouraging but in many quarters there is a general belief that the textile mills are in for a sustained period of profitable operations and that the outlook for an exceedingly good business by all those who supply the needs of the mills is exceedingly good.

Control of "Pebble" in the Processing of Rayon Crepe Fabrics

DURING the past three years rayon crepe fabrics have been very popular and it does not appear that they will be replaced by any new type of fabric during the present year. Many dyers and finishers who have taken up the processing of crepes have found that they have had much to learn, for a crepe fabric can be very troublesome if it is not processed correctly right from the commencement of the crepeing process. For this reason it must be useful to review here various items of information concerning the manner in which rayon crepe fabrics respond to wet processing, such items being the result of large scale experience.

Of course, the most important characteristic of a crepe fabric is its appearance. Firstly, the crinkled or pebble character of the fabric must be uniform, and secondly, this pebble must have the desired degree of coarseness of fineness. Control of the pebble appearance is thus of the utmost importance.

The grey fabric as it leaves the loom is quite flat and free from crepe; the pebble is developed by placing the fabric in a hot (usually boiling) soap liquor under conditions so that it is able to contract perfectly freely in both warp and weft. This shrinkage takes place because of the presence in the fabric of suitable distributed crepe yarns which are characterized in having a high degree of twist (usually 40 to 60 turns per inch). The crepe yarns may be present in both warp and weft, but generally in either the warp or the weft. A usual distribution of crepe yarn is alternate pairs of right and left hand twisted yarns.

How Shrinkage Is Caused

It is easy to understand the manner in which a highly twisted crepe yarn causes shrinkage of a crepe fabric, and the formation of a pebble appearance by reference to Figs. 1a, b and c. In Fig. 1a is shown a highly twisted rayon crepe yarn such as may be present as a weft thread in a crepe fabric just about to be subjected to the creeping process. In its dry condition this yarn shows but little tendency to untwist, but immediately it is wetted, the yarn becomes "lively" and untwists a great deal provided that its ends are free. But when this yarn constitutes a weft thread in the fabric it is obvious that its ends (in the selvages) are not free so that it cannot actually untwist even when the fabric is immersed in boiling water.

The tendency of a twisted yarn to untwist while wet is so great that even if the ends of the yarn are fixed, the yarn must give way in some manner or other to the untwisting force. It can do this by snarling in the manner shown in Fig. 1b. After careful reflection it will be seen that in contorting itself from the straight form (Fig. 1a) to the looped form (Fig. 1b) the yarn has partly untwisted. If the twist of the yarn had been in the reverse direction then the snarl would have taken in the opposite manner as shown in Fig. 1c. From these considerations it will be recognized how the pebble appearance of a crepe fabric develops when the fabric is immersed in a hot soap liquor; each of the pairs of crepe yarns snarl, but they snarl in opposite directions.

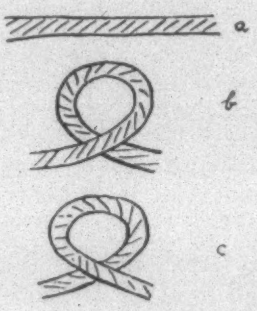


Fig. 1.

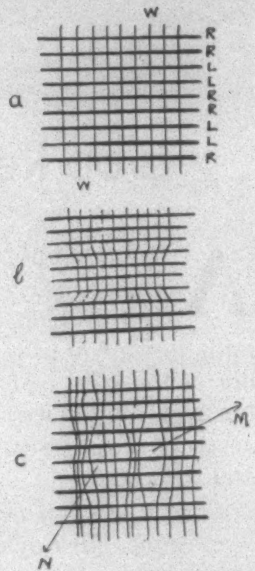


Fig. 2.

Wetting Is Essential

Wetting is essential to crepeing for the presence of absorbed water facilitates movement of the individual fibers which make up the yarn, and also because it causes a substantial swelling of the yarn in diameter, and this in turn causes length contraction. Actually the yarn must be entirely surrounded by water in the crepeing process, it is not sufficient to make the fabric moist by damping it in steam.

It is now possible to consider the conditions which must exist during crepeing if this process is to be completely satisfactory, and for this purpose particular attention will be given to the crepeing of a fabric in which the twist yarns are in the filling as shown in Fig. 2a. Those yarns which have right hand twist are designated by R and those with left hand twist by L.

In order that the appearance of the fabric surface after crepeing may be perfectly uniform it is necessary that the crepe yarns snarl and shrink in length quite evenly. In turn, this even behavior of the crepe yarns is dependent on their having a uniform twist throughout, so that the dyer and finisher is dependent on the manufacturer providing a good quality fabric made from satisfactory yarns. Fig. 2b shows how bar effects (coarse and fine pebble) can arise when there is a change of filling crepe yarn, the two yarns having unequal twist of crepeing power.

If the crepe yarns have unequal twist then a defect known as "gaping" is likely to arise. This is due to the irregular shrinkage of the crepe yarn causing irregular closing up of the warp threads. The fabric appears to gape where the warp threads are less closed as shown at M and N in Fig. 2c. This fault is particularly undesirable since it can spoil the appearance of the finished fabric completely.

Unequal crepeing can be caused by unequal sizing of the yarns present in the fabric. In general, a heavily sized portion of yarn will be less rapidly penetrated by the hot soap liquor used in crepeing, and will, therefore, be more sluggish in its movement. The fault of gaping can be caused through this defective sizing, but the unequal sizing can also cause a difference in the size of pebble.

Unequal stretching of the yarns previous to weaving, either during sizing or winding processes, or unequal steaming of the crepe yarns after insertion of twist, can obviously give rise to inequalities in the creped fabrics.

CONTROL ESSENTIAL

From the above, it is evident that most fabric reaching the dyer and finisher for crepeing is imperfect, and it is because of this that the finisher must be able to control the formation of the pebble so as to even-out the irregularities. He is able to do this to a large extent by passing the grey fabric through an embossing machine of a special type. In this manner there is impressed on the fabric a fine all-over crinkled design. In the impressed parts the crepeing tendency of the yarn is modified—in general, it is slightly restricted. So in this manner the formal crepe appearance of the fabric is slightly modified, but this is made much more uniform.

The embossing machine used for crepe fabric usually consists of a two-bowl calender, one bowl being of steel capable of being internally heated with steam, while the second bowl is of elastic paper or cotton. Sometimes a three-bowl calender is employed. It is essential that the engraving on the steel bowl be not too deep. This is a very important detail since if neglected it may cause damage to many pieces of fabric before discovery. If the engraving is too deep then the crepe yarns may be slightly cut during the embossing. But this cutting may be so slight that it cannot be noticed at the time of embossing. It is only after the fabric has been creped in the hot soap liquor and then stretched out to its finished width that the cutting shows itself in the formation of innumerable small holes. Obviously, there is no remedy at this stage and the creped perforated fabric is practically useless.

Uniform pebble can thus be secured by embossing previous to crepeing. To some extent this embossing reduces the size of the pebble, but it cannot be depended upon entirely to control this size. The crepeing process itself must be adjusted to obtain that coarseness or fineness of pebble required.

CHOICE OF METHODS

In crepeing, the processor has the choice of plunging the fabric into a boiling soap liquor or of entering first in a liquor of moderate temperature and then gradually raising this. Quick immersion in boiling soap liquor results in a coarse pebble owing to the very sudden snarling of the crepe yarns. Unfortunately, it is often accompanied by the defect of gaping due to the unequal ability of the ordinary yarns (filling or warp) following the rapid shrinkage of the crepe yarns. Certainly a fabric should be embossed before attempting to secure a coarse pebble by rapid crepeing for this pretreatment assists to prevent gaping, while it need not prevent the production of a coarse pebble. A coarse pebble is also secured by crepeing the fabric in single layers rather than in the folded book or skein form commonly used.

CALENDERING BEFORE CREPEING

A fine pebble is obtained by crepeing slowly, that is, by placing the fabric in a soap liquor at moderate temperature which is then gradually raised to the boil or slightly less than this. Also treatment of the fabric in book or skein form in crepeing assists the production of a fine crepe. A useful method for securing a very fine crepe consists of calendering the fabric (with slight steaming) before crepeing, since this has the effect of reducing all-over the crepeing forces within the crepe yarns present. A fine pebble can also be secured by arranging that the fabric be made from heavily sized yarns or yarns sized with substances which resist rapid penetration by the soap liquor. Thus, with viscose rayon crepe yarn it has been found that sizing with a product containing a large amount of gelatine with a small amount of softening oil gives a fine pebble, while if a small proportion of gelatine and a large amount of oil are present the fabric ultimately crepes with formation of a coarse pebble.

Once crepeing has taken place it is difficult to modify its appearance satisfactorily while preserving its other desired characteristics. In general it is most easy to make a coarse pebble finer, for this can be accomplished by stretching the fabric somewhat in length or width. It can also be achieved by embossing the creped fabric and this method is often to be preferred since in stretching a coarse pebble fabric there is generally a tendency for a gaping fabric.

For successful processing of rayon crepe fabrics the essential is complete control of pebble production at the time of crepeing, and, so far, experience has shown that the most satisfactory means for achieving this lies in pre-embossing and temperature control of the crepeing liquor.—*Textile Mercury Argus.*

Study of Silk Dress Fabrics

Washington.—A study of the properties and serviceability of silk dress fabrics begun at the Bureau of Standards in the spring of 1930 is included in a commercial standard soon to be issued by the Bureau of Standards. The study covered 69 silk dress fabrics and was carried on by the American Home Economics Association with the co-operation of college students and teachers and the Bureau of Standards.

To make the study effective the students purchased silk fabrics in the local stores, made dresses for themselves and observed the performance of the dresses in service, all as a part of their class assignments.

Practical Cotton Carding

IN order to produce a well-finished cotton yarn in the spinning department it is essential that the quality of the carding be of a sufficiently high standard, and to obtain this it is important to keep the cards in as good a condition as possible.

The first point that will require consideration is the condition of the lap as fed to the card. It cannot be too strongly insisted upon that the quality of the material being fed, should be in as perfect a condition as is possiblt; it is not enough that the cotton should be made into a lap of the required thickness. Every impurity which can be expelled by the opening machines, should be eliminated, and the only work that should be thrown on the card teeth should be the removal of short fibres, and other small impurities.

One of the principal points to be considered in the production of a web that is free from nep, etc., is the efficient maintenance of the card clothing. Too much emphasis cannot be laid on the importance of the grinding and stripping, and it behooves the person in charge to see that this is carried out properly.

GRINDING

No hard-and-fast rule can be laid down in regard to the frequency with which cards ought to be ground. A great deal depends on the class of cotton, the speed of the machine, and the condition of the fillet. It is, however, advisable to have rather frequent grinding with light setting rather than heavy grinding at longer intervals. The setting of the roller to the correct depth is very important. Grinders should never be set so deep as to cause sparks, but on the other hand the setting should not be too light, one being almost as bad as the other so far as the work produced is concerned. The emery should be just set so that an audible hiss is heard. Heavy grinding will cause the wire to be barbed and hooked, and these points will have a tendency to tear the fibres and rob them of their silky white coating of wax, which is responsible for the lustre in the finished yarn. For a mill producing medium counts, grinding of the doffer and cylinder may be performed, say, every three weeks, an advisable speed being approximately 160 r.p.m. for the cylinder and 340 to 350 for the doffer. The grinder may be run at from 600 to 750 r.p.m.

As regards the flats, these may be ground whilst the card is working, say, approximately every four weeks, the roller being left on for eight hours. It is the general custom to grind the flats with a long grinding roller, but of recent years there has been a tendency to use the traversing roller, this tending to give better carding points. However, whilst acknowledging the desirability of having the best possible medium for the grinding of the flats, it is nevertheless a fact that local conditions militate against the true grinding of such, hence it becomes desirable to dismount the flats once a year and give them a separate grinding, this enabling th esurface of the flats to be ground truly.

The cleanliness of the wires on the doffer and cylinder is another necessity to good carding. Stripping may be carried out three times per day at regular intervals, and in the event of vacuum strippers being used, then it will be advisable to strip once or twice per week with the brush, in order to remove any impurities that have become embedded in the wire. The advantage of keeping the fillet clean can at once be appreciated if the cylinder and doffer are run for several hours without being stripped.

Observation of the web as it is stripped from the doffer will show it to be very cloudy. The most efficient time period for the stripping to be done, can be ascertained by stripping, say, every twenty minutes and weighing the strips over a certain period, say, four hours. After the optimum point has been reached, it will be seen from further weighings of the strippings that there is very little increase in weight, thus proving that the fillet has become overloaded with short fibre, etc. This time period seems to be approximately three hours, but may vary according to the cotton.

Once every six months it will be advisable to completely reset the card from back to front and examine carefully for any sign of wear in the various parts. The quality and quantity of the waste extracted will depend on the careful setting of the various parts, and the mote knives and taker-in should be very carefully set, as careless setting of these will result in good cotton being ejected as waste. Similarly with the flats, good carding will necessitate the flats being well set, too close a setting having a tendency to produce neppiness, whilst too wide a setting will be a deterrent to the flats performing their work properly.

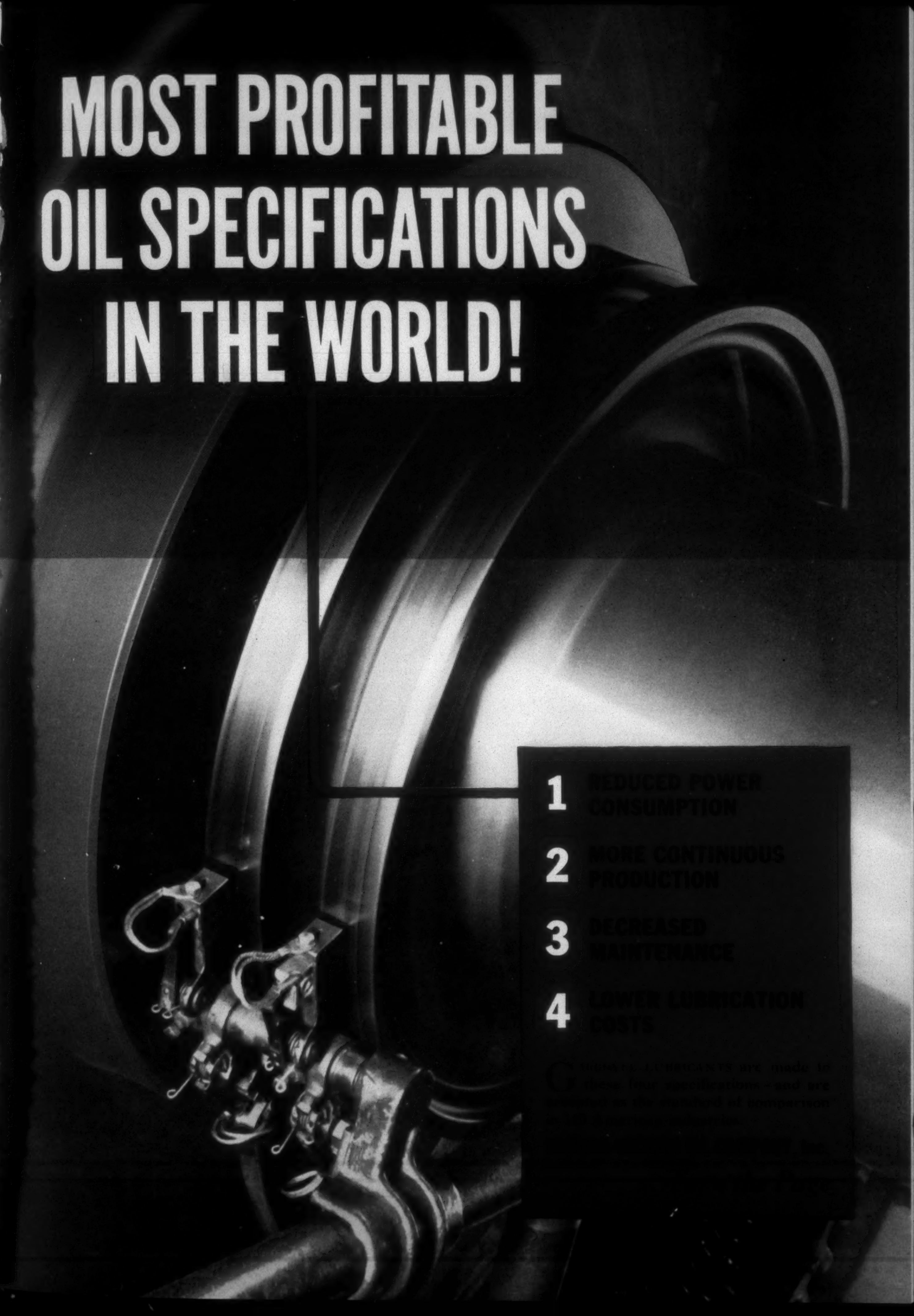
The undercasings are also important factors in the efficient working of the card. If set too far away there will be a tendency for the ejection of much good fibre, and if too close much damage may be done to the fibres. The surface of these undercasings should be kept very smooth and polished, as any rough places will allow the cotton to accumulate and then pass forward in lumps, producing a cloudy web.

The setting of the back and front plates is another point which cannot receive too much attention. If set too wide, the strip produced will be heavy. As regards the doffer, this should be just set as to take the web from the cylinder in an even layer. Likewise the doffer comb should be set at the correct height and distance to allow it ot strip the doffer cleanly.

WASTE REMOVAL

The licker-in waste should be removed at least once per day, depending on local conditions, whilst other wastes may be removed once per week. The flat strips, of course, will be removed after a sufficient amount has accumulated, and deposited in the skip or box provided for such. Oiling is also another item that must be carefully attended to, high speed bearings being oiled twice per

(*Continued on Page 42*)



MOST PROFITABLE OIL SPECIFICATIONS IN THE WORLD!

1. REDUCED POWER CONSUMPTION
2. MORE CONTINUOUS PRODUCTION
3. DECREASED MAINTENANCE
4. LOWER LUBRICATION COSTS

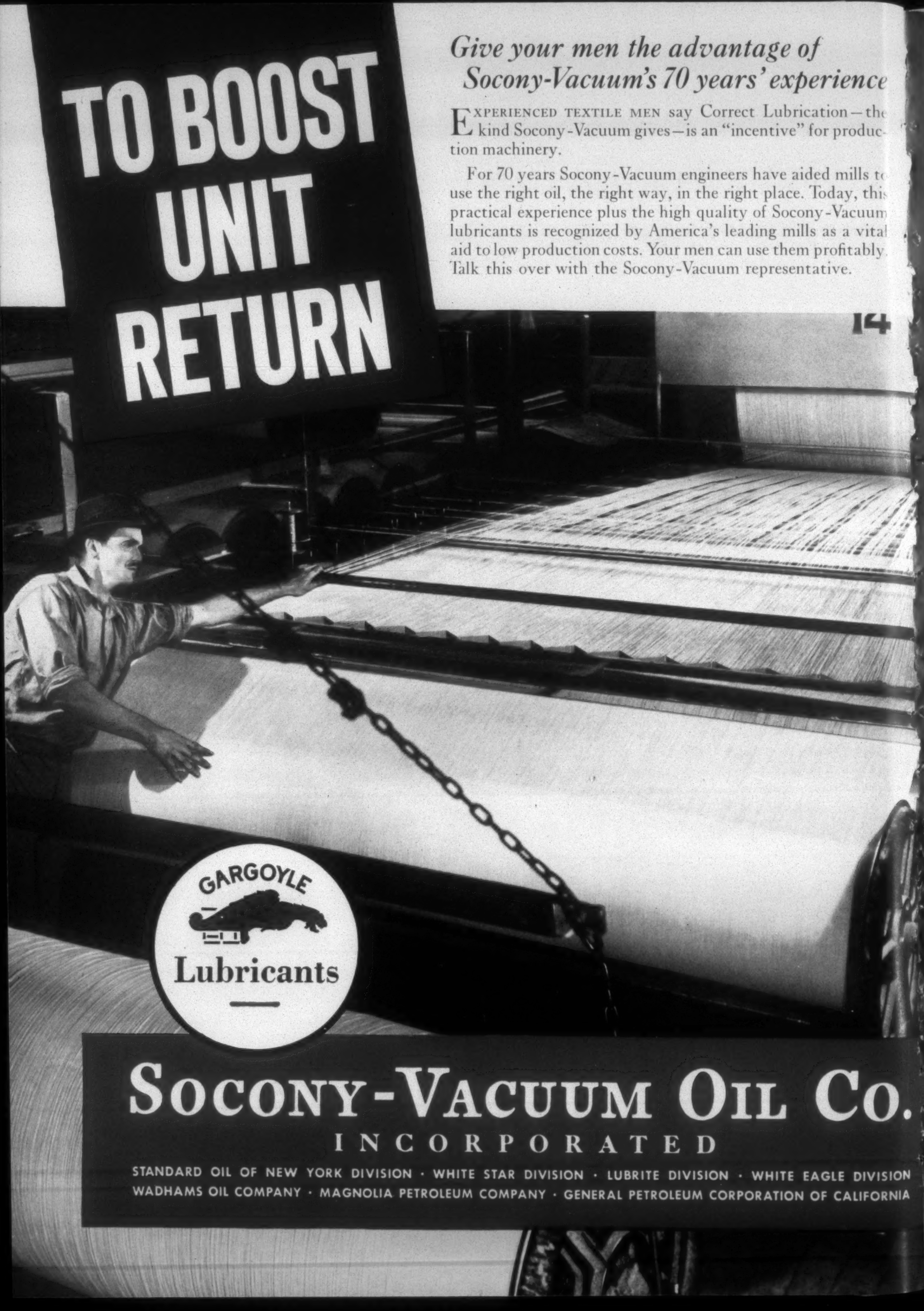
C[illegible] LUBRICANTS are made to these four specifications—and are [illegible] the standard of comparison [illegible]

TO BOOST UNIT RETURN

Give your men the advantage of Socony-Vacuum's 70 years' experienc

Experienced textile men say Correct Lubrication—th kind Socony-Vacuum gives—is an "incentive" for production machinery.

For 70 years Socony-Vacuum engineers have aided mills t use the right oil, the right way, in the right place. Today, thi practical experience plus the high quality of Socony-Vacuu lubricants is recognized by America's leading mills as a vita aid to low production costs. Your men can use them profitably. Talk this over with the Socony-Vacuum representative.



GARGOYLE

Lubricants

SOCONY-VACUUM OIL CO.

INCORPORATED

STANDARD OIL OF NEW YORK DIVISION · WHITE STAR DIVISION · LUBRITE DIVISION · WHITE EAGLE DIVISION
WADHAMS OIL COMPANY · MAGNOLIA PETROLEUM COMPANY · GENERAL PETROLEUM CORPORATION OF CALIFORNIA

INSTITUTE FOR RESEARCH IN SOCIAL SCIENCE

The effect of Spooling on LOOM STOPS . . .

☆ Careful spooler or winder girls with hand knotters can wind yarn without spooler kinks, but it depends entirely upon the care exercised and it is difficult to get them to do it.

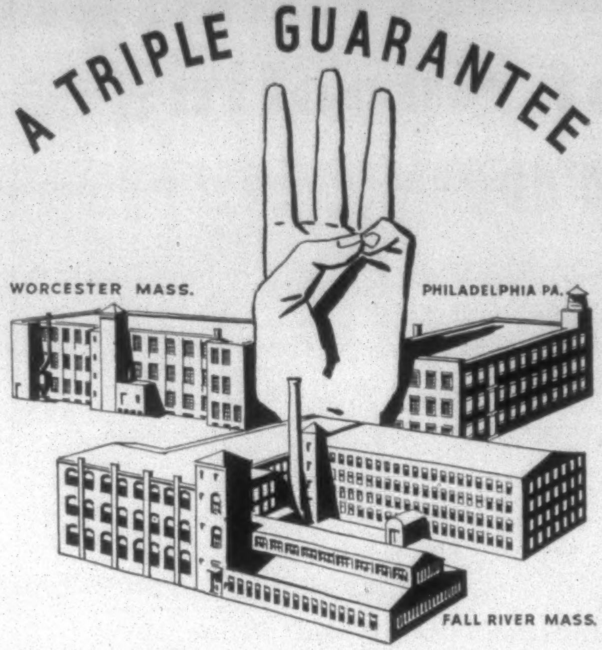
☆ The operator on the Automatic Spooler, on the other hand, has nothing to do with tying the knot or controlling the slack after tying.

★ **Information derived from extensive tests shows that this elimination of the human element results in approximately 90 per cent less spooler kinks, and it has been demonstrated by these same tests that a greater part of warp stoppage in the loom is caused by spooler kinks.**

☆ The importance of the Automatic Spooler in reducing loom stops can be appreciated by the fact that a careful analysis of loom tests covering a period of over nine years showed that 92.2 per cent of the total reduction in stops must be attributed to Automatic Spooling and only 7.8 per cent to High Speed Warping.

The Automatic Spooler is exclusively a part of the

★ **BARBER-COLMAN SYSTEM of SPOOLING and WARPING**


A TRIPLE GUARANTEE
WORCESTER MASS.
PHILADELPHIA PA.
FALL RIVER MASS.

of Uninterrupted Service

Last spring's floods are still recent enough to be a vivid reminder that no factory is immune to the hazards of the elements.

We can not eliminate these hazards, but we can and have built up reserve defense against them in the form of 3 separate *manufacturing* plants in three widely different localities.

While each factory has its specialty, all of them are well equipped to make any card clothing item in our line, if the occasion demands. Hence, if one (or even two) of our factories is temporarily disabled, we still have a factory left that can give you reasonably prompt service.

When you specify Ashworth, you get not only the best in card clothing but also a TRIPLE GUARANTEE of uninterrupted service.

ASHWORTH BROS., INC.
Woolen Div.; AMERICAN CARD CLOTHING CO.
Factories in Fall River, Worcester and Philadelphia
Sales Offices and Repair Shops in Charlotte, Atlanta and Greenville
Southwestern Representative: Textile Supply Co., Dallas, Tex.

PRODUCTS AND SERVICES: Card Clothing for Cotton, Wool, Worsted, Silk and Asbestos Cards and for All Types of Napping Machinery; Brusher Clothing and Card Clothing for Special Purposes; Lickerin Wire and Garnet Wire; Sole Distributors for Platt's Metallic Wire; Lickerins and Top Flats Reclothed at All Plants.

Ashworth
PIONEERS IN
CARD CLOTHING

Some Facts About Rayon

IN a paper presented at the Second Dearborn Conference on Agriculture at Dearborn, Mich., Dr. G. P. Hoff, manager of chemical research for the Du Pont Rayon Company, gave some interesting information relative to rayon yarn development, particularly about the control of luster.

In part he said:

Although the idea of an artificial fiber was first conceived in the seventeenth century and rayon was produced commercially in Europe prior to 1900, the first factory was not operated in this country until 1911. Only one size of yarn was made for several years. Prior to the war the growth of the industry was slow and the acceptance of the product limited. It was called "artificial silk" and was definitely a novelty fiber. Now novelty is a "characteristic" that will carry on for a short time, but soon withers and dies. An example that you will all remember is miniature golf. It takes more than novelty to create an industry like the rayon industry. What then are the reasons for the spectacular growth of an industry which has shown an average growth of thirty per cent per year until the depression and a somewhat more moderate increase during the past five years?

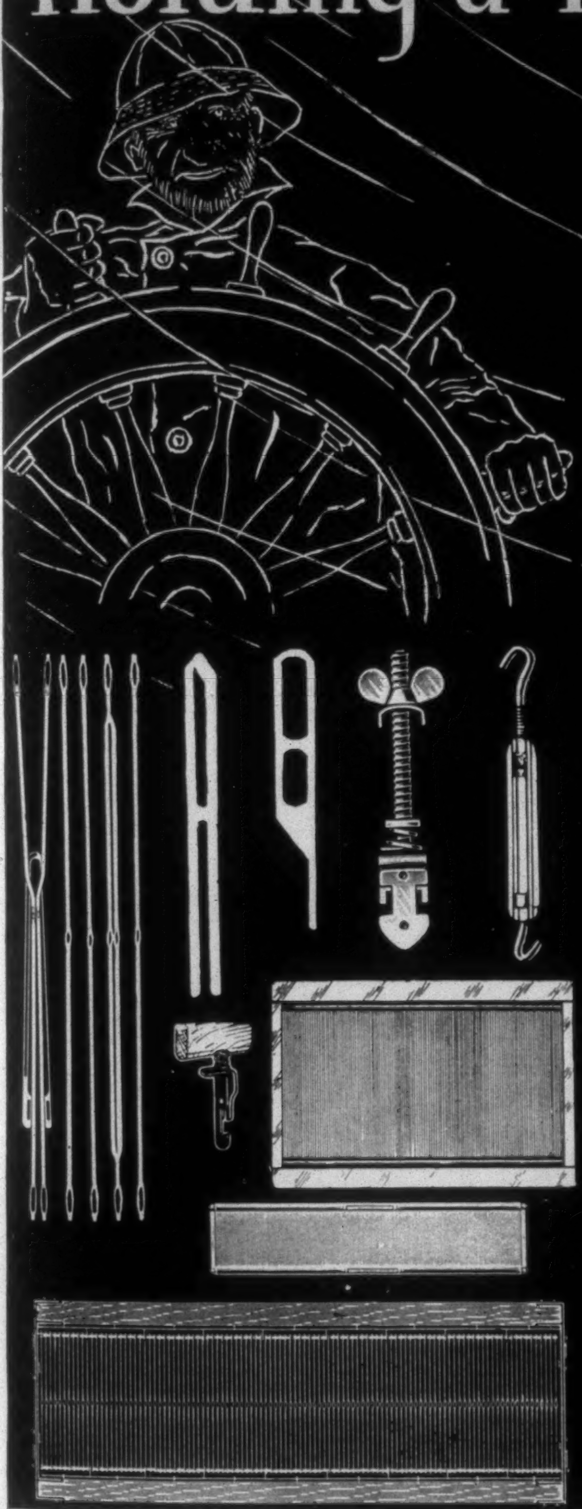
The economist would generalize that rayon possessed or acquired properties that were useful and desirable at a price that was attractive to the customer. Very well. Let us admit that the first rayon offered for sale had many serious defects—it was coarse and weak when wet and harsh and shiny when dry. But it did have glitter and remotely resembled silk. It took dyes well and dyed to beautiful brilliant shades that were clear and pure and much more attractive than could be achieved with the natural fibers. Because of its own low tensile strength it was necessary to mix rayon with cotton, which supplied both strength and softness. Meanwhile the processes of manufacture were studied, research was applied and soon definite improvements in strength, particularly wet strength, were accomplished. This made it possible for rayon to enter the underwear field and find a place which it still occupies.

At the same time that the strength when wet was so low, rayon was also quite sensitive to alkalies, even though they were mild. Strenuous laundering treatments involving hot strong soap solutions tended to impair the strength still further. Such difficulties have long since been overcome. Since 1924 the wet strength of rayon has been nearly tripled; the dry strength has also been improved substantially to a point where it is more than adequate for ordinary textiles uses. Further increases in strength have been realized experimentally and are currently being reflected in new products offered for special uses.

The next important property added to rayon was really a subtraction, if you will permit the remark. The public was tiring of the shininess of rayon. The property that was originally an asset thus became, for many purposes, a liability. It was found necessary to remove the brilliant

(*Continued on Page 16*)

Holding a True and Steady Course–



Thirty-eight years ago we charted our manufacturing course toward certain definite objectives — a course that would give you the greatest possible value in loom harness equipment obtainable.

During this entire period we have held true to our course — unaffected by the storms of panics, depressions, cheap price-cutting competition and the like that would blow a less staunchly built and less wisely captained ship far from its original course.

During 1936 the same ports o'call are being made — so you will enjoy that extra durability, extra fine finish, extra efficient performance, and higher quality production you have come to associate with STEHEDCO Loom Harness Equipment.

If you have never experienced the real economies and improvements STEHEDCO Loom Harness can accomplish in your Weaving Room, you cannot realize the definite competitive handicap you are working under.

Get out from under this needless burden now! Standardize on STEHEDCO Products and make your industrial "cruise" one of real enjoyment and profit this year.

Write us today and we will have one of our Field Representatives call and point out to you just what benefits can be accomplished — no obligation.

Steel Heddle Mfg. Co.
"STEHEDCO" HEDDLES · REEDS · FRAMES AND HARNESS ACCESSORIES

2100 W. Allegheny Avenue, Philadelphia, Pa.

BRANCH OFFICES
Providence, R. I.
Dallas, Texas
Greenville, S. C.
Atlanta, Ga.
Greensboro, N. C.

PLANTS
Philadelphia, Pa.
Greenville, S. C.
Atlanta, Ga.
Montreal, Que. Canada

FOREIGN OFFICES
Huddersfield, England
Mexico D. F. Mexico
Sao Paulo, Brazil
Quito, Ecuador, S. A.
Rio De Janeiro, Brazil, S. A.
Shanghai, China
Calcutta, India
Sydney, Australia
Goteborg, Sweden

HEDDLES
REEDS
FRAMES

QUALITY LOOM HARNESS EQUIPMENT
TRADE MARK
Stehedco

HARNESS
ACCESSORIES

THE NAME THAT STANDS FOR TOPMOST QUALITY AND PERFORMANCE

Japan's Cotton Textile Industry Surveyed

WITH Japan the second largest consumer of raw cotton in the world, and with cotton goods amounting to 24 per cent of all Japanese exports, Japan is as yet only third in cotton spindles, following the United States and Great Britain, *Fortune Magazine* reports in an exhaustive survey of the internal economy of Japan contained in the September issue of the publication. Several articles in the issue are based on data gathered at first-hand, it is explained, by the editors of *Fortune* during a recent visit to Japan, the Cotton-Textile Institute points out.

The answer to the colossal cotton goods production figures, according to the magazine, is that "of Japan's 10,600,000 spindles almost all are modern ring spindles, whereas 45 per cent of Britain's are old-fashioned mule spindles," and that of Japan's "377,000 looms, about 60 per cent of Britain's number, a large number are Toyoda looms, Japan's own invention and conceded to be the most efficient looms in the world."

"Cotton goods are Japan's No. 1 production and export item," the magazine continues. "Her last year's production was about 876,000,000 yen, of which 496,000,000 yen, or 57 per cent, was exported. She also exported 36,000,000 yen of cotton yarn. Total cotton goods exports amounted to 24 per cent of all Japanese exports.

"This industry, started in 1863, about a hundred years after the British beginnings, is now the second largest consumer of raw cotton in the world, following the U. S. And in 1932-33 Japan passed Great Britain and became the world's largest cotton goods exporter. Her chief markets in order are India (21 per cent of exports), Dutch East Indies (13.6 per cent), Manchukuo, Egypt and the Straits Settlements.

"Japan now gets about 80 per cent of her raw cotton from the U. S. and India in roughly equal portions and is the largest buyer in each of those markets.

COARSE YARNS FAVORED

"The great part of Japan's cotton spinning, as befits her cheap Asiatic markets, has always been in coarser counts of yarn—20s and under. In recent years there has been a slight tendency toward finer counts. The spinning industry employs 150,000 workers and is large scale, dominated by seventy companies. Ten of these own 62 per cent of the spindles. These larger companies frequently do their own bleaching and dyeing. Six of them do silk and worsted as well as cotton spinning. Fourteen have entered the new rayon field. And some of them also do cotton weaving; big companies run about a quarter of Japan's cotton weaving looms.

"This tendency is increasing. The great part of Japan's cotton yarn is still woven by small scale factories.

(*Continued on Page 38*)

YOU CAN'T GO WRONG WITH

VICTOR
MILL STARCH
"THE WEAVERS FRIEND"

It Boils Thin . . . Has More Penetration
Carries the Weight into the Fabric

Distributed By:

DANIEL H. WALLACE— SOUTHERN AGENT —**GREENVILLE, S. C.**
C. B. ILER, Greenville, S. C. **F. M. WALLACE, Birmingham, Ala.**
L. J. CASTILE, Charlotte, N. C.

THE KEEVER STARCH CO., COLUMBUS, OHIO

COTTON YARN
Natural or Colored
"As You Like It"

1 COP . . **2** BUTT BRAIDER TUBE . . . . **3** WARDWELL BRAIDER TUBE . . . . . .
4 3" FRANKLIN PACKAGE
5 6" FRANKLIN PACKAGE
6 6" PAPER TUBE . **7** CONE
8 SECTION BEAM . . .

PERFORMANCE (not price) DETERMINES VALUE

• One source for yarn, dyeing and converting and ample capacity (in all departments) to meet emergencies as well as routine requirements. That is our conception of service. ɾ ɾ

• Such complete performance speeds up deliveries, controls and improves quality and concentrates responsibility. The money it saves for customers by reducing lost time, errors and claims is worth far more in the long run than the savings that can be made in the initial cost by shopping for cut prices from incomplete services. ɾ ɾ ɾ ɾ ɾ ɾ

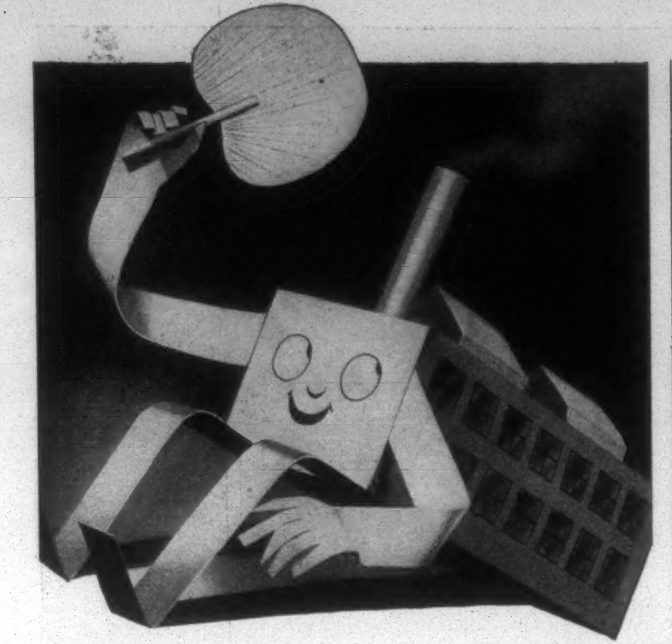
FRANKLIN PROCESS

ESTABLISHED
1910

Pioneers in Package Dyeing

Natural Yarns **Colored Yarns** **Glazed Yarns** **Custom Yarn Dyeing** **Dyeing and Processing Machines**

PROVIDENCE • PHILADELPHIA • GREENVILLE • CHATTANOOGA • CHICAGO • N. Y. REPRESENTATIVE, 40 WORTH ST.



Cool Your Mill with its own heat

The power consumed in your weaving and spinning rooms makes heat. In summer the sun adds to this. Temperatures can be unbearably high. But this very heat can be made to produce effective cooling.

Heat evaporates water. The more heat, the more water that can be evaporated . . . more evaporative cooling obtained. But maximum cooling can only be obtained when your mill is given *maximum air change while humidity is maintained constant.*

Parks Automatic Airchanger (Patented) provides this. In hot dry weather, with closed windows, air in measured amounts is admitted and evenly distributed throughout the room . . . and with humidifiers in constant operation . . . your mill gets maximum cooling. This cooling is appreciable . . . makes working conditions more comfortable . . . steps up production. Parks Automatic Airchanger installations throughout the industry are proving this.

In addition to cooling, the Parks Automatic Airchanger also eliminates spotty conditions, reduces seconds, lowers production costs. It pays for itself in short order. Write for illustrated bulletin 234 which gives complete details.

PARKS
Certified CLIMATE

ACMA

PARKS-CRAMER CO. Fitchburg, Mass. : Charlotte, N.C.

2869

Some Facts About Rayon

(*Continued from Page 12*)

luster from the product. The reduction of the luster of the product was accomplished gradually, but the trend never stopped until maximum dullness was achieved.

Removing Luster

Let me illustrate the property of luster with a highly reflecting surface (a mirror) and a surface coated with a light scattering material (magnesia). The light striking the mirror is almost completely reflected in one plane. Only a small percentage glances away at random angles and is in that way diffused. The surfaces of ordinary rayon fibers being very smooth and regular behave like mirrors; in other words, they are shiny.

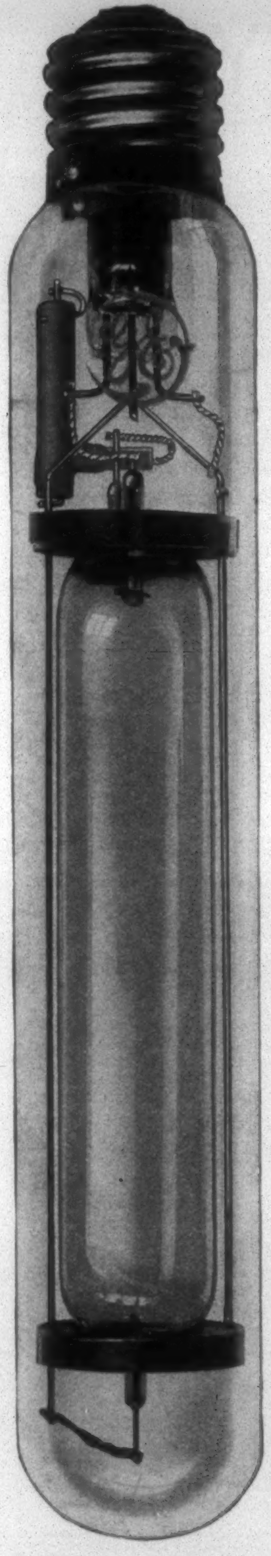
However, when light strikes a surface which has been coated with magnesia, selected because it is extremely effective in scattering light in all directions, there is no particular plane in which the light is reflected. The surface therefore is a dull surface and approaches absolute dullness which may be defined as a complete random scattering of all the light reaching the surface.

We devised a method for measuring the amount of light directly reflected and the amount of light diffused. One is called specular reflection and the other diffuse reflection. We established a ratio in terms of per cent luster and we then had a scale ranging from 0 to 100 per cent. On this scale we rated a mirror 100 per cent and magnesia as 0 per cent. Natural or bright acetate rayon, to use the common expression, ranks very high, on this scale eighty per cent—viscose rayon is a close second with a ratio of seventy per cent. Silk ranks only forty per cent and cotton is at the bottom with four per cent.

Before the textile trade and the ultimate consumer were satisfied the per cent luster of rayon was reduced to as low as one and one-half per cent and the general fashion trend caused the silk manufacturers to dull the luster of their product as well. The pendulum has now swung back somewhat and today there is a demand for Bright rayon (seventy to eighty per cent luster); Semi-Dull (twenty to twenty-five per cent luster) and Dull (one and one-half to four per cent luster). If there are further fluctuations in demand in the future, these can readily be accommodated because means for varying and controlling the luster at any specified level have been thoroughly worked out.

This question of luster control is not by any means limited to scientific circles. The ladies have been interested in this problem for thousands of years and no doubt every woman present has the means at hand. Noses get shiny and reflect too much light in one direction—therefore vanity cases and the application of a delustering agent in the form of powder. But the powder soon rubs off and a fresh application is required. Powder or its equivalent may be applied to the rayon surfaces, too, and numerous treatments involving such substances as aluminum acetate, aluminum soaps, barium sulfate and so on are available. Better results are obtained if the materials are precipitated directly on the fabric. For example, a fabric could be passed through a solution of barium chloride and then through sodium sulfate. The chief objec-

(*Continued on Page 40*)



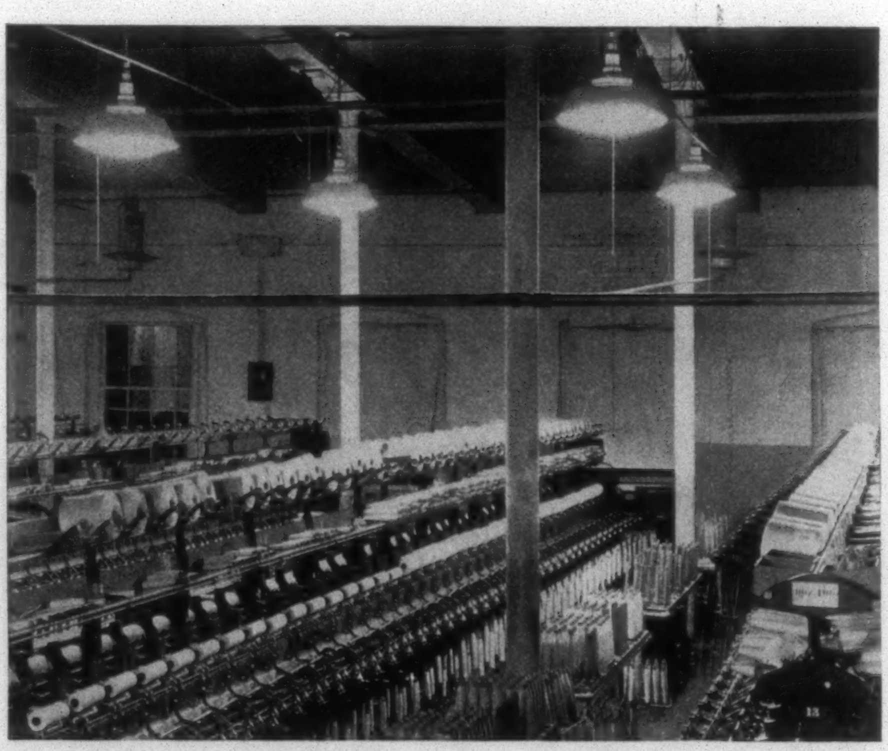
Order your auxiliary devices which were designed especially for this lamp from the General Electric Vapor Lamp Company.

Modern Mercury Lighting for the Textile Industry

The importance of good lighting in the textile industry is more appreciated today than ever before. The new General Electric Mercury Lamps provide almost twice as much light per watt spent for power as any comparable illuminant. Long-lived, unaffected by vibration, these mercury lamps make possible a new high in lighting efficiency. They are furnished in two sizes, 400-watt and 250-watt, and permit lighting specifically engineered to fit the needs of each mill.

General Electric Mercury Lamps combine the inherent features of mercury light with the convenience of a standard Mogul screw base. The 400-watt size burns vertically; the 250-watt companion lamp functions in any position.

Complete details on these lamps may be obtained by writing the General Electric Vapor Lamp Company, 895 Adams Street, Hoboken, N. J., or to any of the Sales Divisions of the General Electric Incandescent Lamp Department.



General Electric Mercury Lamps, spaced on 12 ft. x 15 ft. centers, provide effective illumination for the cotton winding department of this mill.

GENERAL ELECTRIC

642H

General Electric Vapor Lamp Co.
895 Adams Street, Hoboken, N. J.

Incandescent Lamp Department
Nela Park, Cleveland, Ohio

Pepperell Has Its Best Year

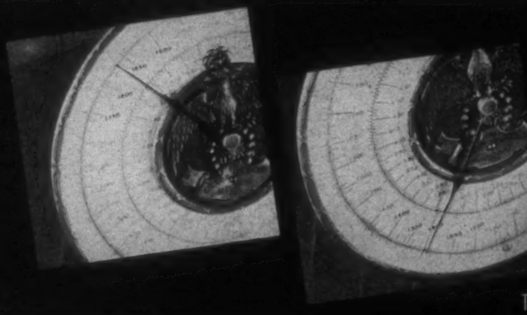
The Pepperell Manufacturing Company, with mills in Lindale, Ga., Opelika, Ala., and Biddeford, Me., during the year ended June 30th topped all of its previous sales records and made a profit of $1,121,359 after deduction for Federal income taxes and after the customary addition to reserves for depreciation and bad debts, according to the annual financial pamphlet.

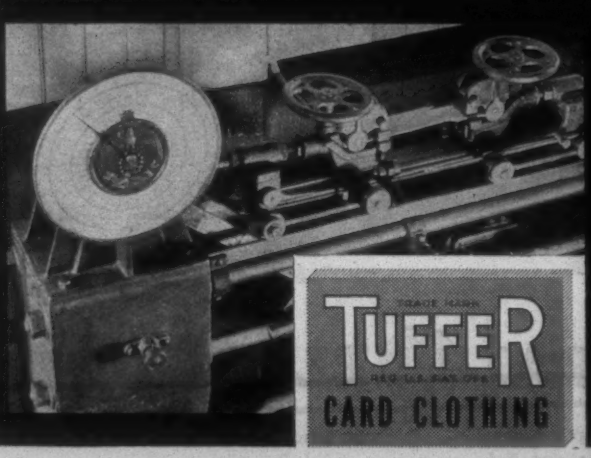
Net sales during the fiscal year amounted to $29,640,764. In his report to stockholders, Russell H. Leonard, treasurer, points out that cloth prices gradually improved during the year with no material increase in costs over the previous year. The major portion of the cloth in the hands of the company of June 30th had already been sold for future delivery. Incidentally, the company closed the year free of debt for the first time since 1933.

Mr. Leonard adds that the "cotton textile problem has moved a few steps farther along its road toward solution. It would appear that inexorable natural law is tending to bring about a balance between production and demand which neither governmental planning nor co-operative group effort has been able to achieve.

It is evident that the total number of spindles in the country is gradually diminishing through the closing down and liquidation of mills. In the past twelve months it is estimated, based on statistics from both governmental and unofficial sources, about 2,000,000 spindles have been scrapped. If the average rate of diminution of the past ten years should continue (and there is no reason to believe that it will not) the physical equipment will be reduced in from two to four years more to a point where the productive capacity should be in line with the demand. This statement is based upon the assumption that only a small percentage of the spindles will be operated exceeding eighty hours per week. If selfish exploiters drop out of the ranks of reasonable employers and adopt longer working schedules, such as three shifts each of forty hours weekly, or two shifts each of fifty hours weekly (one or the other of which is now practiced by perhaps 15 per cent of the industry), this will, of course, nullify the effect of any spindle reduction, and the whirl of the spindle will continue to symbolize a profitless industry; but at the present moment it looks as though economic law is slowly working on the side of the industry, Mr. Leonard stated.

(Continued on Page 39)





TUFFER Foundation is tested to withstand a strain of 1800 pounds before setting and a strain of 1300 pounds when foundation is set with teeth

When TUFFER Card Clothing is working on your machines the severest pulling strain seldom exceeds 350 pounds. Tests show TUFFER Foundation to be several times necessary strength.

In operation TUFFER Card Clothing keeps its efficient points longer, because the wire is held in our own patented foundation, which is "cushioned" just right to make the wire shock proof to the constant hammering of the various stocks carded.

The patented construction of TUFFER Foundation and exacting care exercised by conscientious and capable card clothing craftsmen result in lower carding costs for you. Make sure you have the proper card for your particular work. We can help you specify.

A boss carder, on the job for thirty years, says: **"I have used many makes of card clothing, but I have not found anything that could take the place of TUFFER."**

HOWARD BROS. MFG. CO.
HOME OFFICE AND FACTORY: **WORCESTER, MASS.**
Southern Plant: 244 Forsythe St., Atlanta **Branch Offices:** Philadelphia, Dallas

Products: Fillets for Feed Rolls, Lickerins, Tumblers, Strippers, Workers, Doffers, Fancies, and Cylinders, Doffer Rings, Napper Clothing, Strickles, Emery Fillets, Burnisher Fillets, Top Flats Recovered and extra sets loaned, Lickerins and Garnett Cylinders from 4 to 30 inches and Metallic Card Breasts Rewired at Southern Plant. Midgley Patented Hand Stripping Cards, Howard's Special Hand Stripping Cards and Inserted Eye and Regular Wire Heddles

Where Quality is Paramount, there you will find Saco-Lowell Roth Better Drafting

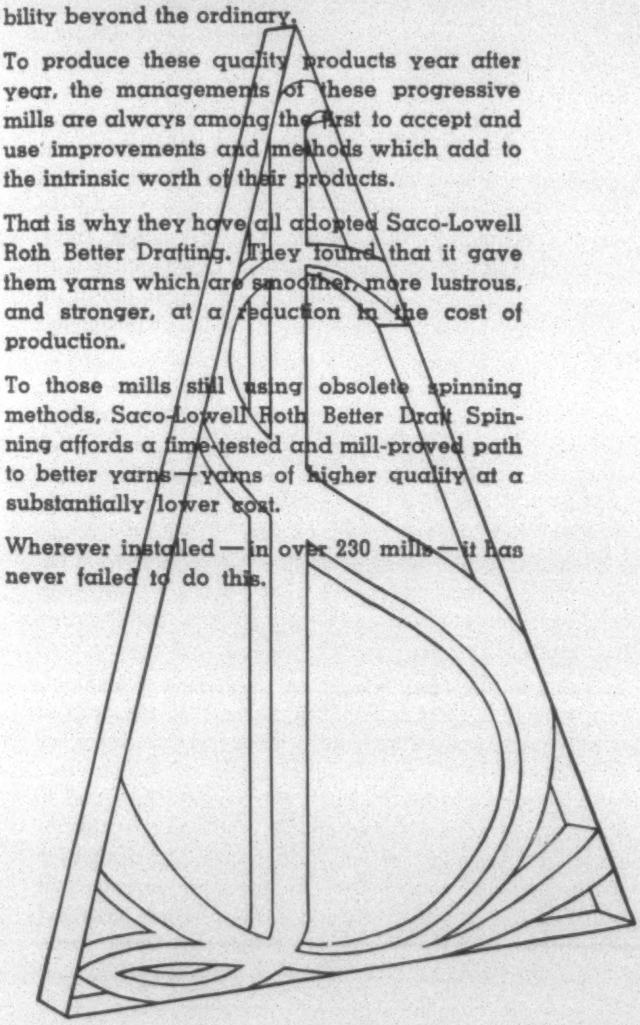
To millions of sheet buyers, these labels are an unquestioned assurance of all-around excellence, of appearance that is pleasing, of durability beyond the ordinary.

To produce these quality products year after year, the managements of these progressive mills are always among the first to accept and use improvements and methods which add to the intrinsic worth of their products.

That is why they have all adopted Saco-Lowell Roth Better Drafting. They found that it gave them yarns which are smoother, more lustrous, and stronger, at a reduction in the cost of production.

To those mills still using obsolete spinning methods, Saco-Lowell Roth Better Draft Spinning affords a time-tested and mill-proved path to better yarns—yarns of higher quality at a substantially lower cost.

Wherever installed—in over 230 mills—it has never failed to do this.



SACO-LOWELL ROTH BETTER DRAFTING

SACO-LOWELL SHOPS
147 MILK STREET, BOSTON, MASS.

Anderson Sees Bull Movement In Cottons

BASING his opinion upon statistics covering supply and distribution of cotton, W. D. Anderson, of the Bibb Manufacturing Company, reaches the conclusion that the "bull movement is to come in the price of merchandise."

Mr. Anderson's views are expressed in a letter just sent to customers of his mills. He reiterates his opinion, expressed in a previous letter, that "we are going to have a whale of a business in textiles this year."

Extracts from Mr. Anderson's letter are given below:

"This week the Government estimated the cotton crop at 11,121,000 bales of 500 pounds each.

"This estimate is more than a million and a quarter bales less than the preliminary estimate of August 8th, the reduction being due to heavy deterioration in the Western portion of the belt resulting from the most unusual drought conditions that have obtained in that section.

"This September estimate of the Government is usually a very reliable indication of the size of the crop, and it seems entirely reasonable for those of us interested to make our calculations and set a program for ourselves based on this figure.

"It has been twelve years since we have begun a new cotton season with the statistical position of American cotton as strong as it is at this writing.

"To show the real supply of American cotton for this present season in comparable figures, it will be necessary to convert the Government crop estimate in 500-pound bales into running bales and include the so-called city crop. This gives us a crop estimate of 11,010,000 running bales, which, added to the carry-over of 7,106,000 bales, affords a total supply of American cotton for this season of 18,116,000 bales. *This is the smallest supply of American cotton we have had since the season of* 1923-24.

"It is interesting to note that of the 7,106,000 bales of carry-over of American cotton in the world, 5,325,000 bales were in the United States on July 31st, and this figure included Government Loan Cotton amounting to 3,200,000 bales. As was stated in my letter, none of this Government Loan Cotton can come on to the market before February 1, 1937, unless it can be sold at a price that will pay the loan with interest and carrying charges, which means that the price of cotton would have to go to 13½c per pound or higher.

"I repeat that American cotton is clearly in a very strong statistical position.

"We will have to go back seven years before we find a world carry-over of all cottons as small as that which existed on July 31st of this year.

"The world all cotton consumption of 27,214,000 bales for last season breaks the record for all time. Unless a real war breaks out in Europe, or something else that is cataclysmic occurs, it seems reasonable to me to conclude that world consumption of all cottons for the present year will exceed that of last year.

"Some well posted authorities are disturbed over the probable increase this year in foreign grown cottons and over the possibility that our exports of cotton may not this season equal our exports for the season which ended on July 31st last.

"No one seems to question the glowing prospects for a large domestic consumption. American mills consumed last season 6,218,000 bales, and at this time the mills of this country are using cotton at an annual rate of about 6,700,000 bales. Feeling as I do that here in this country we are going to have a big textile business, I conclude that it is altogether possible for the present rate of domestic consumption to continue. Any real danger, therefore, which American cotton is likely to encounter must be found in foreign consumption of our cotton and in the production of foreign growths of cotton that will compete with ours.

"Last year the foreigners consumed approximately 6¼ million bales of our cotton. I think it is entirely too early for us to begin to worry about the foreign consumption of our cotton for this year. If you want to be a pessimist, it will be easy to set up bogey-men over the Exchange situation and over the ability of some of our foreign customers to finance normal purchases of cotton from us. For my own part, I believe that conditions with our cotton customers abroad are likely to grow better rather than worse.

"From all the reports I can get, I think it is undoubtedly true that there will be an increase in the crop of some of our foreign competitors. For instance, there are reports that there is a sharp increase in the China crop, but we know so little of what is going on in China and so little Chinese cotton is used outside of China that this, to me, is not very disturbing. The South American crop will probably be some larger, but the latest reports indicate that the crop of India cotton may be less than last year, possibly to the extent of 300,000 to 400,000 bales.

"Anyway, a big percentage of this foreign grown cotton does not compete with our American cotton. It is either better than our American cotton, as is the Egyptian, and is used for an entirely different purpose, or else is much inferior to our American cotton, such as is the Chinese and Indian crop. These inferior cottons would have to sell at an unusually heavy discount below American staple before they would begin to replace American in consumption, to any great extent.

"I conclude, therefore, that it is a little too early to get alarmed about either foreign consumption of our American cottons or serious competition from foreign grown cottons.

"However, I do not want to be understood as attempt-

(*Continued on Page 30*)

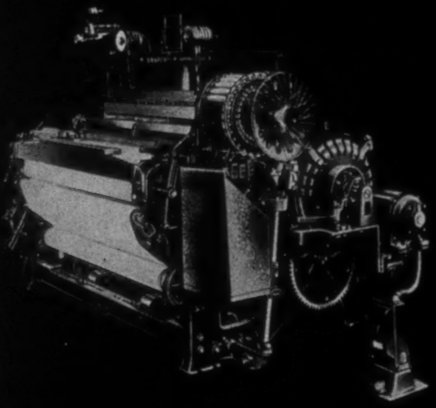
Do You Remember When

A Shiner

Was the Chief Problem
of Rayon Weaving

Those Days Are Gone
Thanks to

Good Mill Management
Producers of Rayon Yarns
and Builders of Looms



Today Rayons
Are Being Woven
at 172 Picks
Per Minute
On

New X K Model High Speed Draper Looms

We Now Offer 4 Models of Looms for Rayon

Draper - Stafford Looms
C Model Draper Looms } Shuttle Changers
X Model High Speed Looms
X K Model High Speed Looms } Bobbin Changers

DRAPER CORPORATION

Atlanta Georgia Hopedale Massachusetts Spartanburg S C

Personal News

W. M. Weaver, of Altavista, Va., is now second hand in weaving at the Drayton Mills, Spartanburg, S. C.

H. J. Spry, formerly with the Dover Mills, Shelby, N. C., has become designer at the Drayton Mills, Spartanburg, S. C.

J. E. Stone, formerly second hand in spinning at the Drayton Mills, Spartanburg, S. C., is now assistant overseer spinning, Aragon-Baldwin Mills, Whitmire, S. C.

Ben Swink, of Altavista, Va., has become overseer of drawing-in and slashing at the Drayton Mills, Spartanburg, S. C.

Rex Hughes, formerly second hand in the Dover Mills, Shelby, N. C., is now second hand in weaving at the Drayton Mills, Spartanburg, S. C.

U. D. Snider, formerly second hand in weaving at the Judson Mills, Greenville, S. C., has become overseer of weaving at the Drayton Mills, Spartanburg, S. C.

C. R. Tinsley has been promoted from head loom fixer to second hand in weaving at the Drayton Mills, Spartanburg, S. C.

L. H. Darnell has been promoted from loom fixer to second hand in weaving at the Drayton Mills, Spartanburg, S. C.

G. G. Simmons, formerly superintendent of the National Weaving Mills, Lowell, N. C., has been appointed assistant to Smith Crow, superintendent of the Drayton Mills, Spartanburg, S. C.

J. L. Rhinehardt has been promoted from overseer of carding and spinning at the Mansfield Mills, Lumberton, N. C., to superintendent of the Jennings Mills, of the same place.

H. M. McKelvie, vice-president and general manager of the Firestone Cotton Mills, Gastonia, N. C., was the guest speaker at the meeting Monday of the Charlotte Engineers Club in Charlotte.

CLINTON STARCHES
FOR ALL TEXTILE PURPOSES
Manufactured by
Clinton Company
CLINTON, IOWA
QUALITY SERVICE

Friends of L. A. Corriher, treasurer of the Corriher and Linn Mills, Landis, N. C., will learn with much regret of the death of his son, H. B. Corriher, age 29. The young man died Tuesday night as a result of injuries received in a fall down a stairway. He was manager of a laundry at Marion, Va.

C. L. Chandler, vice-president and general manager of the Jackson Mills, at Iva and Wellford, S. C., and High Shoals, N. C., was painfully but not seriously injured in an automobile accident near Gaffney, S. C., last week.

C. H. Lockman has resigned as superintendent of the Jennings Cotton Mills, Lumberton, N. C.

James L. Mitchell has resigned as superintendent of Holyoke Worsted Company, Holyoke, Mass., and accepted the position as assistant to C. B. VanHorten, manager, Wytheville Woolen Mills, Inc., of Wytheville, Va., and will be in charge of production. Mr. Mitchell is a native of Scotland and comes from a long line of woolen manufacturers.

J. A. Verhage, factory representative for W. A. Scholten's Chemische Fabrieken, of Groningen, Holland, has been transferred to the United States so that his services as technical expert and chemical engineer may be available to the textile mills of this country.

J. A. Verhage

Mr. Verhage has been a member of the company's technical staff for a number of years and during the past five years has been rendering similar service to the textile mills of Europe. He is a chemical engineer with a degree from one of the large technical colleges in Holland.

W. A. Scholten's Chemische Fabrieken are said to be one of the oldest and largest starch makers in the world. The company was established in 1839. Products include Quellin, Textiline, Flexelin, Ultra-Dextrine and other sizing, finishing and printing starches for the extile industry.

Mr. Verhage will spend a considerable portion of his time in the South and will make his headquarters with the Southern representative of the company, H. D. Meincke, Commescial Bank Building, Charlotte.

Program for Weavers' Meeting

The technical discussion at the meeting of the Weavers' Division of the Southern Textile Association, at Hotel Franklin, Spartanburg, S. C., Saturday, September 19th, will be based upon the following qoestions, it is announced by Smith Crow, chairman of the Division.

What are the most frequent causes of filling breaks on the transfer in Draper looms? Also automatic C. & K. looms?

What is the best method to use for getting good cover on broadcloths?

What should be the average life of a good standard make shuttle?

What per cent of relative humidity should be maintained for good running work on high count broadcloths? Also print cloths?

What per cent stretch should be had at the slasher on cotton yarns, varying from 30s to 50s?

What temperature should be maintained in size box to secure well sized warps?

At what speed should rayon slasher 100 denier with approximately 5,000 ends be run?

Should rayon size be run through a circulating system?

Mr. Crow states that if any men have other questions to be presented at the meeting, he would be glad to have them submitted before the meeting opens at 10 a. m.

A very large attendance is expected for the meeting and all men interested in weaving are urged to attend.

Cotton Consumption Rises

Washington.—Cotton consumed during August was reported by the Census Bureau to have totaled 574,289 bales of lint and 65,382 bales of linters, compared with 603,203 and 70,246 during July this year, and 408,325 and 59,102 during August last year.

Cotton on hand August 31st was reported held as follows:

In consuming establishments, 752,219 bales of lint and 153,062 of linters, compared with 898,084 and 182,137 on July 31st this year, and 648,533 and 164,342 on August 31st last year.

In public storage and at compresses, 4,336,724 bales of lint and 29,693 of linters, compared with 3,924,101 and 35,038 on July 31st this year, and 5,895,412 and 27,845 on August 31st last year.

August imports totaled 12,671 bales, compared with 20,305 in Jply and 8,002 in August last year.

Exports during August totaled 182,487 bales of lint and 10,585 of linters, compared with 156,262 and 19,331 in July.

Cotton spindles active during August totaled 23,433,658 compared with 23,249,572 in July this year and 22,046,186 in August last year.

Cotton consumed during August in cotton-growing States totaled 480,546 bales, compared with 504,321 in July this year, and 342,899 in August last year.

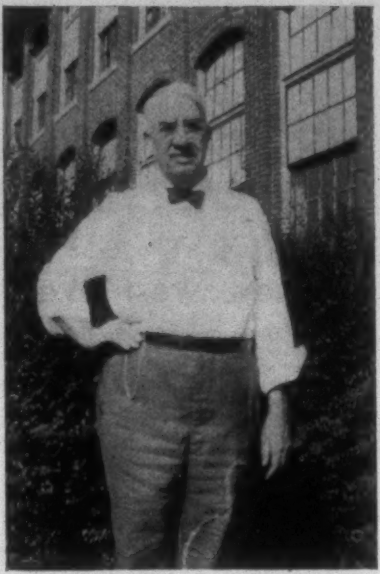
OBITUARY

BRUCE GRIFFIN

Bruce Griffin, aged 35, of Charlotte, Southern sales manager of the Industrial Rayon Corporation, died last Friday morning from injuries received in an automobile collision just outside of Greenville. His car collided head-on with another car when both were rounding a curve in a heavy rain.

Mr. Griffin had been in charge of the Charlotte offices of Industrial Rayon Corporation for several years and was widely known in the textile industry. He was a native of Oneonida, N. Y., and funeral services were held there Sunday.

Mill Men Worth Knowing



J. H. BUNN, Superintendent Henderson Cotton Mills

Mr. Bunn has served with the Henderson Cotton Mills, Henderson, N. C., for the past 35 years. He began as shipping clerk and through successive promotions was made superintendent in 1910, a position he has filled since that time.

Return Air Condenser for Picker and Napper Rooms

Knowlton & Newton Co., Lowell, Mass, builders of processing equipment for textile mills, are now offering a return air condenser said to be particularly adapted for picker and napper room use. It is designed to filter dust laden air from spikers and nappers, collect flocks and dust and return the same air dust free, to the room.

The manufacturers claim that in addition to its cleaning value, the device aids better work delivered by the picker because the steady flow of air to and from the picker keeps the lap uniform and results in better yarn. It is also claim that the condenser reduces fire hazards.

NORMA-HOFFMANN
BALL, ROLLER AND THRUST BEARINGS
• •
FOR EVERY LOAD
SPEED AND DUTY
• •
WRITE FOR CATALOG
NORMA-HOFFMANN
BEARINGS CORPN., STAMFORD, CONN., U. S. A.
PRECISION

Items

ON HIGH SPEED WARPING

—a few facts about the Universal System of High Speed Coning and Warping . . . and why the savings in 3 out of 4 mills will produce a greater net return than any other high speed system.

The Lowest Investment

LOWEST DEPRECIATION COST—Depreciation cost over the entire life of the machine is, with the Universal System, the lowest of all high speed systems.

THE LOWEST MAINTENANCE COST—It runs about $50.00 a year on a $10,000 investment.

LOWEST TOTAL WINDING COST—The uniform yarn speed on the Universal Winder reduces operator walking time and increases winder production as much as 25% to 33 1-3%.

LOWEST PER CENT OF WASTE—Accurate measurement of beams at the warper saves waste at the slasher. And longer yardages mean fewer sets laid in on the slasher.

Lowest Creeling Cost

LOWEST PROCESS STOCK INVENTORY—Magazine creeling eliminates dead yarn on the barrel of spool and saves thousands of dollars in inventory of stock in process.

PERFECT SELVEDGES—The fixed position of the beam on the warper means better selvedges—no slack or taut ends going into the warp.

NO LOST OR CROSSED ENDS—Electrically-controlled stop motion and powerful brake on warper prevent lost and crossed ends in loom beam. Elimination of slasher stops provide more uniform sizing throughout the warp.

FLEXIBILITY—For several yarn counts, the extra cone holder for each warping end in the magazine creel allows loading one count while another is running.

BETTER WEAVING—Lowest warp end breakage and highest efficiency. The Universal System of High Speed Warping is a method of inspecting yarn to give better weaving.

IN 3 OUT OF 4 MILLS—MORE NET RETURN

UNIVERSAL WINDING CO
BOSTON PROVIDENCE NEW YORK UTICA
SPRINGFIELD CHARLOTTE ATLANTA

2593

Georgia Group to Discuss Slashing and Weaving

SLASHING and weaving subjects will be discussed at the fall meeting of the Textile Operating Executives of Georgia, to be held on Saturday morning, September 19th, at the Georgia School of Technology, in Atlanta, Ga., beginning at 9:30 a. m. daylight saving time. This organization embraces the superintendents and department heads of the Georgia mills, and attendance of these men, with visitors from Alabama and other States, will provide an attendance of approximately 250, it is expected.

Harry H. Purvis, superintendent of the Chicopee Manufacturing Corporation, Gainesville, Ga., will lead the discussion on slashing; and Allen Jones, superintendent of the Muscogee Manufacturing Company, Columbus, Ga., will conduct the weaving discussion. The meeting will be opened with a brief address by William N. Banks, president of the Grantville Mills, Grantville, Ga., who this year is president of the Cotton Manufacturers' Association of Georgia.

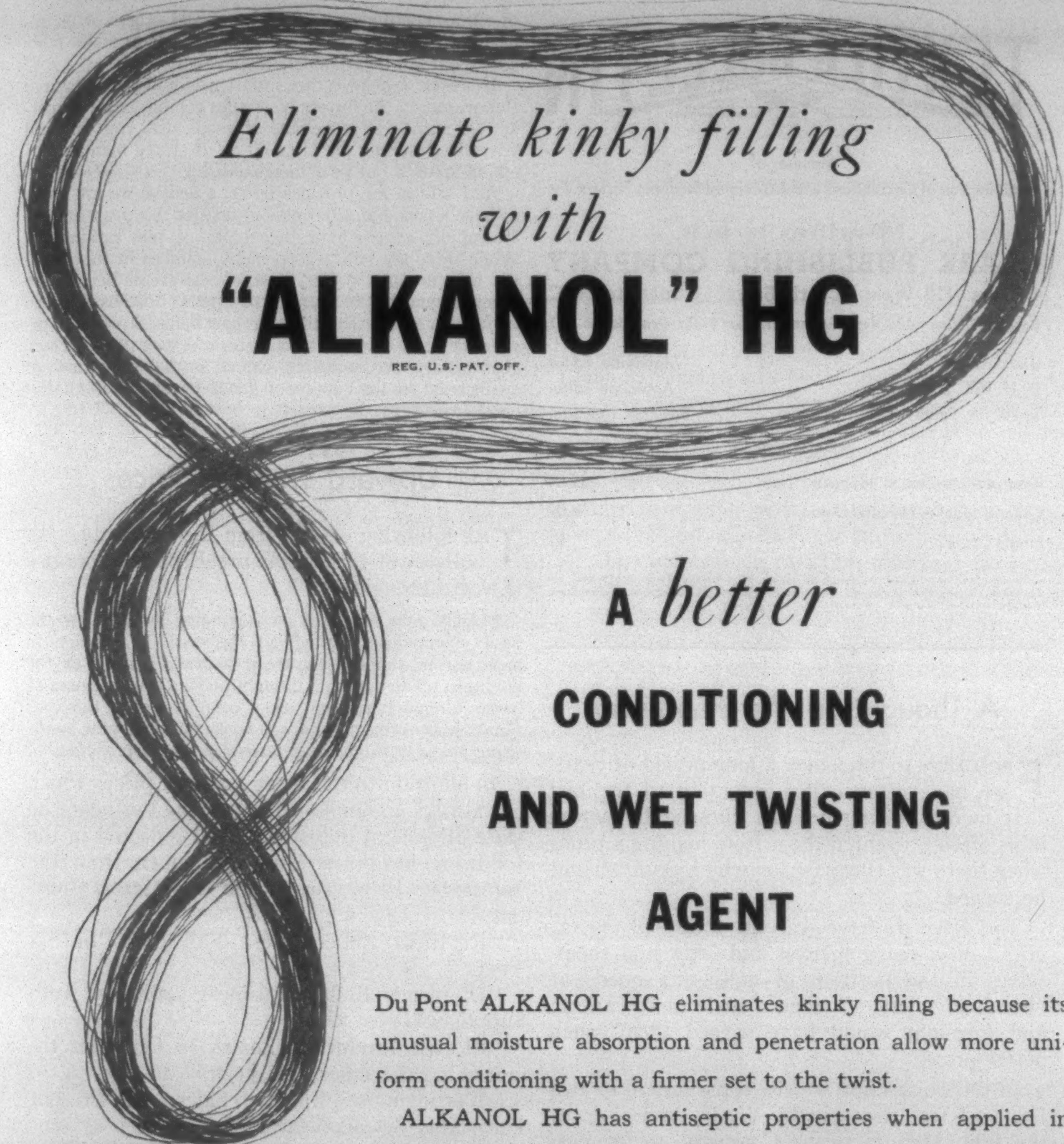
J. C. Edwards, general superintendent of the Martha Mills, the B. F. Goodrich Company, Thomaston, Ga., is retiring general chairman of the Textile Operating Executives of Georgia. V. J. Thompson, superintendent of the Rushton Cotton Mills, Griffin, Ga., is vice general chairman. New officers will be elected to succeed these men, whose terms expire at this meeting, and also a member of the executive committee and a secretary-treasurer will be named.

The questionnaire which will form the basis of the practical discussion at the Georgia meeting is appended:

SLASHING

1. What material do you use as a primary covering for squeeze rolls; what weight and how many yards do you use?
2. What is the best way in which to keep a slasher blanket in good condition; both when the blanket is in use and not in use?
3. What is the best way to prevent hard size roller marks on yarn?
4. (a) At what point in making up a size mix can the softener be added with best results? Should this ingredient be added with the others while the mix is cold, or should it be added later after the mix has been brought to a boil? (b) What are your cooking periods with respect to length of time required to bring to a boil; length of time of boiling; what is your cooking temperature? (Please state your local conditions.)
5. What is the cause and remedy of foaming in the size box?
6. What temperatures should be maintained in storage kettles and size boxes for best results? Are open or closed coils recommended? Why?
7. Does it pay to carry size over until the next day

(*Continued on Page 32*)



Eliminate kinky filling
with
"ALKANOL" HG
REG. U.S. PAT. OFF.

A *better*
CONDITIONING
AND WET TWISTING
AGENT

Du Pont ALKANOL HG eliminates kinky filling because its unusual moisture absorption and penetration allow more uniform conditioning with a firmer set to the twist.

ALKANOL HG has antiseptic properties when applied in proper concentration for conditioning purposes and will prevent mildew for reasonable periods.

ALKANOL HG may be used in spray type machines or in troughs on wet twisters.

DU PONT
REG. U. S. PAT. OFF.

For additional information or technical assistance communicate with our nearest office.

E. I. DU PONT DE NEMOURS & CO., INC., ORGANIC CHEMICALS DEPARTMENT, FINE CHEMICALS DIVISION, WILMINGTON, DEL.

BRANCH OFFICES

Boston, Mass., Charlotte, N. C., Chicago, Ill., New York, N. Y., Philadelphia, Pa., Providence, R. I., and San Francisco, Calif.
Represented in Canada by Canadian Industries Limited, Dyestuffs Division, Beaver Hall Building, Montreal, Quebec, and 372 Bay Street, Toronto, Ontario

TEXTILE BULLETIN

Member of
Audit Bureau of Circulations and Associated Business Papers, Inc.

Published Every Thursday By
CLARK PUBLISHING COMPANY
Offices: 118 West Fourth Street, Charlotte, N. C.
Eastern Office: 434 New Industrial Trust Bldg., Providence, R. I.

David Clark	Managing Editor
D. H. Hill, Jr.	Associate Editor
Junius M. Smith	Business Manager

SUBSCRIPTION

One year payable in advance	$2.00
Other Countries in Postal Union	4.00
Single Copies	.10

Contributions on subjects pertaining to cotton, its manufacture and distribution, are requested. Contributed articles do not necessarily reflect the opinion of the publishers. Items pertaining to new mills, extensions, etc., are solicited.

A Thought on Merchandising

From time to time, over a long period of years, we have often called attention to the fact that merchandising policies pursued by cotton mills often prevented them from making a profit when there was every reason why a profit should be earned.

Too often we have seen the mills sell too far ahead on a rising market and later find themselves in the position of delivering goods at "break even prices" when a little more caution and foresight would have earned them much better prices.

In this connection we cite a paragraph or two from a letter just sent by W. D. Anderson, of the Bibb Manufacturing Company, to the customers who buy the products of his mills. Speaking of the present price status of print cloths, which have recently sold in tremendous volume, Mr. Anderson says:

> In order for the average mill on print cloth constructions today to earn cost plus 6 per cent on invested capital, these goods should have to sell at from 35c to 36c per pound, or, say, 6¾c per yard for 64x60—5.35, and 9c per yard for 80x80.
>
> The only explanation I have as to why the textile industry is willing to go along in this manner is to be found in the existence of an unusual amount of solid ivory above the eyebrows of those of us who manage the individual units of the industry and those who merchandise our goods. We are more individualistic than the cotton farmer. Most of us treasure a secret ambition to put some of our competitors out of business, and others of us appear to believe that the way to succeed is to make more goods and sell them for less money.
>
> However, I believe this situation is going to be cured this season by the buyers of textiles coming into the market for such a large volume of goods that you will find yourselves bidding the price up on us stupid manufacturers, in spite of our poor merchandising.
>
> As I said in my previous letter, I believe we are going to have a whale of a business in textiles this year, and we are rapidly approaching the limits of our production. While there are still a good many spindles in this country that are not active, most of these spindles are so obsolete, and so inefficient, that prices will have to go very much higher than they are now before it will be possible for these spindles to operate in competition. Then, good workers are becoming scarcer, so that very much of an increase in the supply of goods beyond present production need not be expected.

Upward Trend of Prices

The following extract from the September 5th bulletin of the Brookmire Economic Service is worth thought:

> Largely as a result of an expanding demand for the basic commodities throughout the world in relation to more normal supplies, the trend of prices is again on the up-grade. The domestic drought and its consequences of larger foreign purchases, when combined with the continued improvement in world consumption levels, *make rising prices of the basic industrial products probable.*

In addition to the rising trend of prices which has always accompanied improving business, the state of general industry is well reflected in the following headlines which are taken from the September 10th issue of the *Wall Street Journal*:

"Retailers Expect Best Fall Sales in Six Years."

"Dividends Reflect Business Gains by Auto Suppliers."

"Electric Production Shows 20 Per Cent Increase in September 5th Week."

"Westinghouse Electric Sales, At Present Pace, May Set Six-Year High."

"Keystone Steel & Wire Nets $1,501,493 in Fiscal Year."

'Loadings Last Week Near 1931 Peak."

"Air Express Volume Up 106.1 Per Cent in Half; 31.9 Passenger Gain."

"Auto Factory Sales Up 15 Per Cent in August; Best Since 1929."

"Universal Products Gets New Business."

"Treasury 2¾ Per Cent Bond Offering Nine Times Over-Subscribed."

"Colt's Fire Arms Outlook Improves."

"Pontiac Sales for August 12,180 Units; Best in Seven Years."

'Ward Sales in August 20 Per Cent Over Year Ago."

Explaining the Shrinkage

We still do not believe that the Government was justified in making its August 8th cotton estimate of 12,481,000 bales which represented an average yield of 199.7 lint pounds per acre.

We give, however, the Government justification of its position, which was as follows:

> Material changes took place in the prospective United States crop. Generally speaking improvements in conditions in the eastern part of the belt were much more than offset by damage to the crop caused by drought in the western portion. In the territory from Mississippi and Tennessee to western Texas and Oklahoma very drastic deterioration occurred during August caused by extremely hot dry weather the damage is most serious in Oklahoma and northwest Texas where many fields were almost a complete failure. The crop was affected by the drought, however, as far East as eastern Mississippi. In most of this area on the first of August the cotton plants were in excellent growing condition and gave promise of setting a heavy crop. The unusually high temperatures and lack of moisture, however, caused excessive shedding of squares and young bolls and also prevented the full betterment of the bolls remaining on the plants. The heat also caused many of these bolls to open prematurely which results in further reduction of the yield. Prospects have improved in all States from Alabama east with the exception of Florida where prospects remain the same during August. Weather conditions in those States have been very favorable to cotton but the crop in this area is in various stages of development due to unfavorable weather during the first part of the season. For this reason the outturn in the eastern part of the belt is unusually dependent on date of frost. Weevil damage in most areas are relatively light because of weather conditions. In south Texas, however, weevils were very numerous and losses from this source have been quite heavy in many localities.

The Value of Cotton

A recent Government report shows that cotton was worth $861,312,000 to cotton farmers in 1935, including the value of linters and seed that was sold or used on the farm, and government benefits payments.

Wheat was second in value during 1935 with gross income of $482,796,000, while other top ranking crops among 78 considered were corn, $349,830,000; truck crops, $304,435,000; tobacco, $250,323,000; potatoes, $191,080,000; and farm gardens, $188,161,000.

But the value of all 1935 crops, $3,855,867,000, was less than that of 14 livestock products, $4,652,436,000, it was said.

Even the cotton crop was far below the value of milk and its products for the year, $1,680,625,000. Other large items in the livestock income group included, hogs, $935,913,000; cattle and calves, $920,464,000; eggs, $557,843,000; chickens, $313,263,000; and sheep and lambs, $124,328,000.

The value of chickens and eggs was almost exactly the same as that of cotton including linters.

Technical Meetings Under Way

The first of the Fall series of technical meetings sponsored by the Southern Textile Association is that of the Weavers' Division to be held in Spartanburg on Saturday.

The Association plans about seven meetings between now and the first of the year. They will be held by the various groups, and by the time all are held, will provide a most exhaustive study of various problems in carding, spinning, weaving and mill engineering.

The attendance at these meetings showed a marked increase last year and we are hopeful to see even larger numbers attend this year. While many mills encourage their superintendents and overseers to attend the meetings, others show no interest and their men are not having the advantages enjoyed by the operating executives who regularly attend and take part in these discussions. We are hopeful that a larger number of mill executives will see fit to encourage their men to go to these meetings this fall.

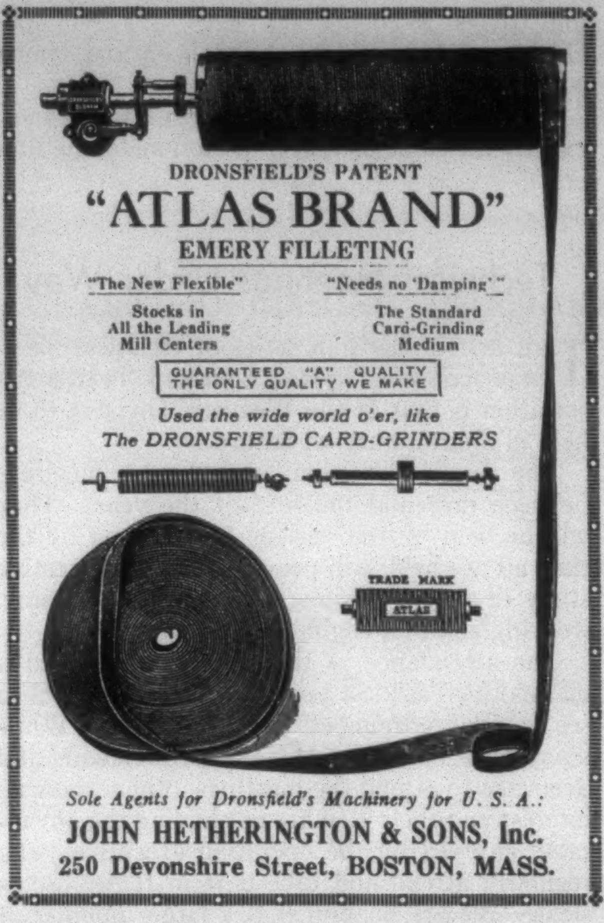
The work of the Southern Textile Association is primarily of an educational character. For this reason the officers of the Association always welcome mill men at the meetings and stress the fact that no man need remain away because he is not a regularly enrolled member.

Protest Importations of Japanese Goods

Asserting that importations of cotton goods from Japan in 1935 had shown an increase of 632 per cent over 1933, the Rhode Island Textile Association passed strong resolutions against permitting the flood of cheap Japanese goods.

The resolution will accomplish nothing because the vote of two relief workers is more important than that of one textile manufacturer.

It is easier to secure votes with relief money than by giving consideration to manufacturers seeking relief from the unfair competition of goods made in foreign countries with cheap labor.



DRONSFIELD'S PATENT
"ATLAS BRAND"
EMERY FILLETING
"The New Flexible" "Needs no 'Damping'"
Stocks in All the Leading Mill Centers
The Standard Card-Grinding Medium
GUARANTEED "A" QUALITY THE ONLY QUALITY WE MAKE
Used the wide world o'er, like The DRONSFIELD CARD-GRINDERS
TRADE MARK ATLAS
Sole Agents for Dronsfield's Machinery for U. S. A.:
JOHN HETHERINGTON & SONS, Inc.
250 Devonshire Street, BOSTON, MASS.

NOW AVAILABLE
A Limited Supply of
Vaughn's Carding Lessons
A book of calculations and tables compiled by a practical carder of many years experience.
Price 50c
A years Subscription to Textile Bulletin and a Copy of the Book $2.35
(Cash With Order)
Clark Publishing Co.
Charlotte, N. C.

Mill News Items

ABBEVILLE, S. C.—The Abbeville Mill is now weaving rayon instead of cotton goods, and many changes in the operating force have resulted.

ALBANY, GA.—The Dixie Spindle & Flyer Co., Charlotte, N. C., is overhauling the machinery of the Flint River Cotton Mills, using the Guillet overhauling system.

ROANOKE RAPIDS, N. C.—The Rosemary Manufacturing Company are having their spinning rolls renecked with the Guillet taper fitted neck, the work being done by the Dixie Spinde & Flyer Co., Charlotte, N. C.

TALLASSEE, ALA.—The Mt. Vernon-Woodbury Mills, Tallassee plant, have purchased a Guillet overhauling system from the Dixie Spindle & Flyer Co., Charlotte, N. C., this system to be used in the maintenance of their machinery.

RALEIGH, N. C.—The Raleigh Burlap Bag Company, headed by J. M. Gottlieb, who operates similar plants in Charlotte and Columbia, S. C., has been established here. The local unit will make new burlap bags and rework used sacks.

COWPENS, S. C.—Cowpens Mill here, which has been closed for the last three months because of "the uncertain condition of the textile market," has resumed operations. W. G. Day is acting superintendent. About 250 persons are employed on two shifts at the plant.

FITZGERALD, GA.—By the latter part of the week the building for a new hosiery plant will be completed, it is stated here. The installation of machinery will begin immediately.

The company, which will manufacture silk hosiery, states that it expects to begin operations in October with 50 employees.

RADFORD, VA.—Century Ribbon Mills, Inc., a New York corporation, with principal office in Radford, has been granted a certificate of authority by the State Corporation Commission to manufacture and deal in ribbons and kindred articles. The maximum capital stock was listed at 100,000 shares common, no par value, and $630,400 preferred. Irvin Carns was named as agent in charge of business.

ROANOKE RAPIDS, N. C.—Firemen battled flames in the blending room of the Rosemary Manufacturing Company here nearly two hours before bringing them under control.

The blaze swept through the room rapidly, destroying a quantity of loose cotton. The cause was not known.

BRIDGEPORT, ALA.—Browning Hosiery Mills, Bridgeport, and Charleston (Tenn.) Hosiery Mills have ap-

Mill News Items

pointed F. M. Grauer & Co., New York, exclusive selling agents for their product in the East, North and West. Both mills will continue to be represented in the South by J. M. Lynch & Bro., Louisville, Ky.

The Browning plant manufactures women's seamless hosiery and women's and misses' elastic-top anklets, and the Charleston mill makes children's elastic top anklets.

Graham, N. C.—The suit brought by minority stockholders to dissolve L. Banks Holt Manufacturing Company, cotton goods manufacturers, has been continued for seven months by agreement of plaintiffs and defendants.

The continuance was granted following a two-day hearing held before C. W. Hall, referee in the case.

Plaintiffs allege that the company, which has a capital stock of $900,000, has not paid dividends for ten years and it is to the best interest of the stockholders that it be dissolved.

The defendants, at the hearing here, sought to show that the dissolution, aside from throwing hundreds out of employment, was not to the best interest of those concerned.

Ashland, Va.—Subscriptions totaling approximately $3,100 have been raised in Ashland and its vicinity by a group of local business men who are interested in bringing a silk hosiery mill to Ashland. With all but approximately $900 of the $4,000 necessary to erect the building already pledged, Luther P. Hartsook, town treasurer, who has been active in securing the enterprise, estimates the mill will be operating in about three months.

The manufacturer, whose name has not been revealed, has been operating a hosiery mill in Pennsylvania. He has been asked by the committee to furnish specifications for a plot and a description of the kind of building needed. Work on the building will start immediately after the necessary information has been received.

Emporia, Va.—The Emporia Textile Mills has been reorganized and orders have been placed for new equipment. The new company takes over the Meherrin Mills.

This mill will specialize in high class drapery and upholstery fabrics and will be in position to render efficient service to the trade on both jacquard and dobby fabrics.

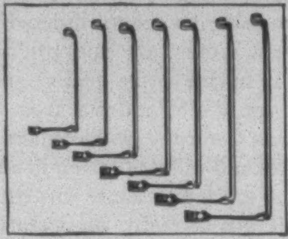
The Pepperell Manufacturing Company, with offices at 40 Worth street, New York, will handle the sales.

The new organization is capitalized at $100,000.

The new officers are: C. H. Gingher, president-secretary; R. W. Jordan, vice-president, and R. W. Little, treasurer.

C. H. Gingher, who has been associated with Burlington Mills for a period of years, will manage the new organization. R. W. Jordan and R. W. Little are well known Emporia business men and are prominent nationally in the lumber and box industry.

Bruno Majer, who has managed Meherrin Mills for the past two years, will act as assistant manager and will devote most of his time to the designing department. His


We Manufacture Flyer Pressers

IN THE LIGHT OF PRESENT DAY COMPETITION IT IS VERY ESSENTIAL THAT YOUR MACHINERY BE KEPT IN THE HIGHEST STATE OF EFFICIENCY.

We specialize in the Repairing and Overhauling of—

—Steel Rolls
Spindles
Flyers
Doffers
Comb Bars
Fly Frames
Spinning Frames
Twisters
Spoolers

A word from you will place our skilled, experienced mechanics at your command.

Southern Spindle & Flyer Co., Inc.
CHARLOTTE, N. C.

We Manufacture, Overhaul, Repair, Re-arrange and Erect Cotton Mill Machinery

W. H. MONTY, Pres. and Treas.

PRE-TESTED
for YOUR Protection

Every roll of Charlotte Belting is tested and restretched at the factory, by running the belt under tension over a series of pulleys. This reduces the amount of "take-up" after installation and discloses any imperfections in manufacture, thus insuring a belt as nearly perfect as can be made.

+ ✚ +

Prompt Shipment and Service

+ ✚ +

Charlotte Leather Belting Co.
CHARLOTTE, N. C.

Makers of a Complete Line of Leather Belting

long experience in the designing field will enable him to hold the styling on a high plane.

The new automaic box looms, ordered from Crompton & Knowles Loom Works, are equipped with their recent improvements to insure better quality and production.

The dyeing equipment ordered from Gaston County Dyeing Machine Company will contain their improved patented features and will dye cotton in any form. A new building is being erected to house this equipment.

The new unit will be ready for operations in October.

Brevard, N. C.—A. W. Wheeler & Son, Inc., a newly-formed corporation, has leased the Joines Building here for the manufacture of full-fashioned hosiery.

A. W. Wheeler, of Hendersonville, superintendent of the Chipman Hosiery Mill at East Flat Rock until sold to the Shipman-LaCrosse Hosiery Company, and his son, George W. Wheeler, also of Hendersonville, will direct operations, which are expected to begin by the middle of November. Between 75 and 80 workers will be employed.

Mills To Fight Labor Decision

Greensboro, N. C.—Orders were signed Monday in U. S. District Court by Judge Johnson J. Hayes allowing the Cannon Mills Company of Concord, and the Golden Belt Manufacturing Company of Durham to appeal to the Fourth Circuit Court of Appeals from the District Court's decision of June 17th against the plaintiff mills and in behalf of the National Labor Relations Board and its agents of the tenth district.

The mills were seeking to have the National Labor Relations Act declared unconstitutional and to have the N. L. R. B. permanently restrained from holding inquiries into alleged discriminations against workers because of union affiliations.

The courts also signed decrees dismissing the temporary injunctions which had been in effect. The plaintiffs decided not to push their pleas for continuation of the injunctions, pending hearing of the cases on appeal, but reserved the right to renew motion for injunction pending appeal before either the District Court or the Circuit Court of Appeals. It is supposed they will take such action in event any move is made to hold the labor hearings.

Anderson Sees Bull Movement in Cottons

(*Continued from Page 20*)

ing to forecast a 'bull' movement in the price of cotton. I do claim that cotton statistics, coupled with business conditions in this country and elsewhere, point to a stable cotton market.

"My own opinion is that the 'bull' movement is to come in the price of merchandise.

"Staple cotton textiles of every kind are dirt cheap today, and no one connected with the industry or with the distribution of cotton goods need be afraid to make a normal investment in raw material today. The specter of possible inventory losses is far removed.

"On the other hand, with staple textiles still selling at below cost of production to the average mill, there is a reasonable chance that a purchase today or a contract made today will look awfully good to the buyer before the merchandise is finally distributed.

"In my last letter to you I gave you Federal Trade Commission statistics to show that the carded yarn mills were doing business without profit. On the last page of this letter I give you the Federal Trade Commission's statistics on print cloth yarn fabrics for the period January to June, 1935—the last figures available. These fabrics include not only standard print cloths out of which percales and other similar goods are made, but also include all the standard broadcloth constructions. These figures cover a study of 50 mills. Elsewhere in their analysis of the situation, they show a composite statement from 42 mills in the print cloth yarn group which, in the period January to June, 1935, sold 60,938,136 pounds of goods at a net loss of 1.2c per pound. The Textile Institute states that inasmuch as the manufacturing margins on these goods were lower during the first six months of 1936 than during the first six months of 1935, the inference is strong that during the first six months of this year the print cloth mills repeated their record of the previous year and suffered further losses.

"The situation today in the print cloth group is no better. If there is any change, it is worse.

"In order for the average mill on print cloth constructions today to earn cost plus 6 per cent on invested capital, these goods should have to sell at from 35c to 36c per pound, or, say, 6¾c per yard for 64x60—5.35, and 9c per yard for 80x80.

"The only explanation I have as to why the textile industry is willing to go along in this manner is to be found in the existence of an unusual amount of solid ivory above the eyebrows of those of us who manage the individual units of the industry and those who merchandise our goods. We are more individualistic than the cotton farmer. Most of us treasure a secret ambition to put some of our competitors out of business, and others of us appear to believe that the way to succeed is to make more goods and sell them for less money.

"However, I believe this situation is going to be cured this season by the buyers of textiles coming into the market for such a large volume of goods that you will find yourselves bidding the price up on us stupid manufacturers, in spite of our poor merchandising.

"As I said in my previous letter, I believe we are going to have a whale of a business in textiles this year, and we are rapidly approaching the limits of our production. While there are still a good many spindles in this country that are not active, most of these spindles are so obsolete, and no inefficient, that prices will have to go very much higher than they are now before it will be possible for these spindles to operate in competition. Then, good workers are becoming scarcer, so that very much of an increase in the supply of goods beyond present production need not be expected.

"It will be a great mistake for you as buyers of textiles to overlook the mounting costs and the definite tendency toward an inflation in the price of all commodities. Our public debt increases daily and the deficits are being financed by borrowings. There is no promise of a balanced budget in the near future, and so long as such conditions obtain in this country and in other countries, the prices of staple commodities will gradually work higher. It is reported that Germany, Italy, France and Switzerland are beginning to admit that their production costs are now so high that they cannot compete in world markets. Germany and Italy must be having the same experience, as they are financing themselves with debt expansion. The prospects, therefore, are for rises in world prices of commodities and services.

"I am thankful to say that we here are enjoying a large volume of business, and it comes from our good friends and customers literally all over the United States. We want our customers to prosper, and we want to prosper with them. I believe that success in this direction lies in pushing out for the increased business which I believe will be available. I think it is time for all of us to lengthen our tent ropes.

"It will be a great pleasure to serve you, and I want to again warn that when the price of staple textiles moves from a loss to a profit, the jump may startle you."

Show Better Lighting Aids Cloth Quality

Studies made in the cotton textile industry by the Illuminating Engineering Society show that while the economic margin available to justify better lighting is small, scientific illumination in the mills has improved the quality and reduced the yardage of seconds, it was reported at the 30th IES convention in Hotel Statler, Buffalo, N. Y.

The report presented by W. G. Darley of the Nela Park division of the General Electric Company, at Cleveland, covered many phases of the cotton textile industry, including gray goods and denims from the mixing of cottons through weaving and final inspection.

Results of scientific mill lighting, Mr. Darley reported, are: An appreciation in the quality of the goods as a whole, reduction of seconds, better supervision because of a reduction in serious breaks, better cleaning and maintenance of machinery, eyesight conservation, attraction of a better class of employees, fewer accidents, improvement of morale because of bright and cheerful working conditions, and over a long period of time an increase in production of sufficient to at least offset the added lighting cost.

Staggered Arrangement

"The lighting practice in the more progressive cotton textile mills has gradually evolved from low wattage bare lamps on drop cords to lamps of 300-watts or more in relatively glareless, modern, direct lighting equipment mounted at the ceiling," says the report. "In many cases such units are spaced on a staggered arrangement, one per bay-division throughout the mill.

"This system is often increased for the weave sheds of the finer goods mills by filling out the staggered arrangement by giving two units per bay-division. A bay-division is usually 10 feet 8 inches by 25 feet or 266 square feet in area. As a large number of mills, however, have not advanced past the drop cord system with clear or daylight unshaded lamps, it is obvious that this field offers wide possibilities for future development."

The report goes into technical details regarding foot candles required for various secttion operations including storage of raw cotton, opening bales, mixing and fluffing cotton, machine picking, carding, first and second drawing, slubbing, roving, spinning, spooling and winding, warping, slashing, drawing-in, automatic tying-in, weaving and inspection in the cloth room.

Costs Compared

A comparison is made between the actual costs of a sub-standard illuminating system in the weave sheds of gray goods mills and modern efficient lighting costs for the same operations. The report says the estimated annual lighting cost over the weaving area of mills without highly efficient lighting was about $6.50 per loom which was said to be 0.6 per cent of the value of the goods produced. With a slightly higher illuminating cost, the report says savings are affected through increased production, fewer seconds and more efficient operation. Regarding labor cost, the report says:

"With a weaver taking care of about 36 looms the labor cost application to each loom for the weaver's time is $37.35 per year or 3.32 per cent of the value of the gross production per loom in a gray goods mill. This does not represent the total labor cost applicable directly to the loom, because for every hour spent by the weaver there are approximately three hours spent by other persons in the weave shed such as loom fixers, bobbin creel fillers, overseers, second hands, cleaners, etc. The total labor cost, therefore, in the weave shed alone might be estimated at about 12 per cent of the value of the gross production."

In summarizing the survey, the report says:

"The recommended level of illumination for looms is that provided by the order of 200 watts per loom or 40 to 70 foot candles if incandescent lamps are used. For gray goods, one unit per loom mounted over the loom and 12 feet from the floor produces the recommended seeing condition. However, consideration might be given to the initially less expensive system of one unit per two looms mounted over the work alley. For denims and other dark cloth without sheen, one unit per loom is recommended. The unit for lighting the looms should evenly illuminate the area approximately 56 inches in diameter from a distance of 9½ feet. It should be relatively large in diameter to minimize shadows and should be free from glare at normal viewing angles."

Japanese Cloth Imports Show Drop

Washington.—Imports for consumption of Japanese cotton cloth declined more than 83 per cent from June to July, according to figures made available by the Commerce Department.

Sharp reduction in Japanese imports resulted largely from a Presidential proclamation of May 21st hiking duties on certain cloth classifications an average of 42 per cent, it was concluded by observers.

At the same time it was reported that imports for consumption of cotton cloths from all countries declined more than 60 per cent in the same period, falling from 14,624,000 square yards in June to 4,705,000 square yards in July.

Cotton textile representatives here were jubilant over the results of the new duties, particularly so because many members of the trade had not expected such a tremendous decline in cloth imports.

Economy **FLOORS**
for COMPANY HOUSES

LOCKHART
END-MATCHED FLOORING

LAYS WITHOUT WASTE
•
GOOD TO THE LAST INCH!

Just Specify
LOCKHART BRAND
IN
COTTAGE and BUNGALOW GRADES
•
MANUFACTURED FROM CHOICE ALABAMA YELLOW PINE
•
ASK YOUR LUMBER DEALER OR
Jackson Lumber Co.
LOCKHART, ALABAMA

ENGINEERING SALES COMPANY
S. R. & V. G. Brookshire
District Representative

GATES Vulco Rope V-Drives
BARRETT Trucks, Elevators
OSBORN Tramrail Systems
KEWANEE Coal Conveyors
LYON Lockers, Shelving
STANDARD Conveyors

Nutting
Trucks, Wheels, Casters

217 Builders' Bldg CHARLOTTE, N. C. Phone 3-4232

·CARECO·ONE·PIECE·FURNACE·LINING·

A PLASTIC LINING USED IN PLACE OF FIRE BRICK
ADAPTABLE TO ALL TYPES OF BOILER FURNACES

CARECO ONE-PIECE FURNACE LINING
Reg. U.S. TRADE MARK Pat. Off.

Boiler furnaces lined with CARECO last 2 to 4 times longer than those lined with fire brick. Write for quotation—use CARECO to repair or line the furnaces.

CAROLINA REFRACTORIES COMPANY
HARTSVILLE, S. C.

Georgia Group To Discuss Slashing and Weaving

(*Continued from Page 24*)

and use it? If the size is carried over, is it necessary to add extra starch to the first kettle to bring the strength of the old size up to standard? What per cent of size is thrown away each day? If you carry size over, either from one day to the next or over the week-end, for how long a period (number of hours) can you carry it over successfully; and do you keep it heated or allow it to get cold?

8. How can drying be made uniform throughout all of the yarn, leaving a predetermined amount of moisture in all ends and in both sides of the same end? Specifically, we want details as to what results are secured with the moisture content speed control on slashers?
9. What results are secured by using variable speed on slashers?
10. Do you find the use of positive drive on slashers to be increasing or decreasing? Why?

WEAVING

1. What has been your experience with the new devices for reducing pressure on the shuttles, tending to reduce power as well as save loom supplies?
2. Does high pressure lubrication have any advantages over regular oiling on looms? If so, what are they?
3. What causes broken filling on the change? What causes ropy filling? Does conditioning the filling help eliminate broken filling and ropy filling?
4. What has been your experience with rubber-covered sand rolls?
5. What is the best method to keep filling from rolling in the magazines on a magazine loom?
6. How do you strip quills? What does it cost per 1,000 quills stripped?
7. What advantage has the method of paying weavers by the pick over paying by the cut? What per cent increase in production was noticed after installing pick counters? Do you read the counters daily or weekly?

Supply of U. S. Cotton is Low

Washington.—The Bureau of Agricultural Economics reported the smallest prospective world supply of American cotton since 1929.

Latest crop reports plus trade estimates of world carry-over as of August 1st indicated a present total world supply of about 19,600,000 bales of American cotton, the bureau said. Last year's supply was slightly larger. The peak supply for recent years was 26,000,000 bales in 1931. Stocks continued burdensome until 1934 when the crop totaled less than 10,000,000 bales and the world supply of American cotton was about 20,,000,000 bales.

The bureau reported a sharp improvement in price coincident with the declining supply and increased consumption during the recovery period.

Liquidation of the Lowe Mill, Huntsville, Ala. Offered for Quick Disposal Exclusively by McCord, Inc.

49 Westminster St.
Providence, R. I.
Tel. Gaspee 1481

100 E. 42d St.
New York, N. Y.
Tel. Ashland 4-0345

Lowe Mill
Huntsville, Ala.
Tel.. Huntsville 57

TERMS OF SALE:—NET CASH—MILL FLOOR. All offerings are made subject to prior sale and quoted on mill floor basis. All machinery and equipment is in exceptionally fine condition. Immediate action is recommended.

OPENER ROOM

1—Bale Breaker No. 4 with 12 ft. extended feed apron, and feed regulator, Saco-Lowell, 1921, 40".
1—Vertical Opener with pipe delivery, adj. grids, Saco-Lowell, 1921.
1—Lattice Opener No. 12 with No. 3 Condenser feed and cage section, Apron delivery, Saco-Lowell, 1929.
1—Centrif-Air Cleaner, Centrif-Air Mch. Co., 1929.
1—24" Hopper feed for Waste, Saco-Lowell, 1929.

PICKER ROOM NO. 1

1—40" Two beater breaker lapper with Tandem Automatic Feeder, Ind. motor on A frame, 1 blade, 1 spike beater, Saco-Lowell, 1928.
2—40" Finisher Lappers with Kirschner beaters, A frame for motor, Saco-Lowell, 1928.
1—Ceiling Condenser No. 9, Saco-Lowell, 1921.
1—Exhaust Fan, "Monogram" No. 6, Sturtevant, 1921.

PICKER ROOM NO. 2

1—W-3 two-section Roving Waste Opener, apron delivery, Saco-Lowell, 1928.
1—40" One-beater Breaker Lapper with Auto-feeder, Atherton, 1898.
2—40" Intermediate Lappers, Atherton, 1898.
2—40" Finisher Lappers,, Atherton, 1904.
1—Ceiling Condenser No. 6, Saco-Lowell, 1916.
1—Exhaust Fan, "Monogram No. 7, Sturtevant, 1916.

CARD ROOM NO. 1

43—40" R. F. Cards, 27" Doffers, 12" Coilers, reclothed and redrawn in 1929, all right hand, Whitin, about 1912.
7—Boxes Flats reclothed.
34—Deliveries Breaker Drawing, metallic rolls, 1⅜" front roll, 12" coilers, 6-delivery heads, hank clocks, 30 deliveries, Saco-Pettee, 1912, Rolls and Gearing renewed in 1929; 4 deliveries, Saco-Lowell, 1929.
34—Deliveries Finisher Drawing, same as above.
4—Slubbers, 72-spindles each, 9" gauge, chain drive, 11"x5½", hank counters, Woonsocket, 1929.
8—Intermediate Frames, 114 spindles each, 7" gauge, chain drive, 9x4½, Woonsocket, 1929.
1—Intermediate Frame, 102 spindles, 7" gauge, chain drive, solid front rolls, 9x4½, hank counter, Woonsocket, 1921.
10—Speeders, 184 spindles each, 5¼" gauge, chain drive, solid front rolls, 7x3½, hank counter, Woonsocket, 1929.
12—Speeders, 192 spindles each, 4⅝" gauge, drives—10 double vertical, 1 single vertical, 1 chain drive, solid front rolls, 7x3, hank counter, Woonsocket, 1901-1904. Campbell ball bearing front rolls.

HUMIDIFIER SYSTEM

3—Bahnson Master Controls.
110—Bahnson Humidifier Heads, 220 volt, ⅛ H. P.
Allis-Chalmers Pump, 2½"x2", Type S. J. H., 3500 R. P. M., 175 G. P. M. 80 lbs. press.

AIR CLEANING SYSTEM

Air cleaning system complete, including 42 stations, Piping, Hose, and Air Compressor.

CARD ROOM NO. 2

33—40" R. F. Cards, 27" Doffers, 12" coilers, 9 left hand, 24 right hand, Whitin, about 1912.
24—Deliveries Breaker Drawing, metallic rolls, 1⅜" front roll, 12" coilers, hank clocks, 6-delivery heads, Saco-Pettee, 1912, Rolls and Gearing new in 1929.
24—Deliveries Finisher Drawing (same as above).
1—Slubber, 60-spindles, 10"x5" Double Vertical Shaft drive, Woonsocket, about 1904.
2—Slubbers, 72-spindles each, 9½" gauge, 12"x6", double vertical shaft drive, Woonsocket, about 1904.
4—Intermediate Frames, 108 spindles each, 8" gauge, 10"x5" double vertical shaft drive, Woonsocket, about 1904.
12—Speeders, 168 spindles each, 8"x3½", twin vertical shaft drive, 5¼" gauge, Woonsocket, about 1904.

SPINNING ROOM

42—Warp Spinning Frames, 256 spindles each, 2¾" gauge, band drive, 7" cylinders, separators, Whitin clutch spindles, long base, metallic thread boards, Dixon's 2 pc. adjustable saddles, Speakman lever screws, case hardened front bottom rolls, combination builders, belt driven, front rolls new 1929, spindles only few years old, Fales & Jenckes, 1901-1906.
18—Warp Spinning Frames, 256 spindles each, other details same as above, except these frames equipped with old style cup spindles heavy type base, combination builders, Fales & Jenckes, 1901-1906.
52—Filling Spinning Frames, 256 spindles each, 2¾" gauge band drive, Dixon's adjustable saddles, Speakman lever screws, case hardened front bottom rolls, new in 1929. 30 frames have metallic thread boards, balance have wood thread boards, combination builders. Spindles new about 1929. 8 are box head frames; Fales & Jenckes, 1901-1912. 37 frames have Whitin long base spindles, 15 frames have Draper short base clutch spindles.
7—Boxes of new spindles, Whitin clutch, 250 to a box.

SPOOLING AND WARPING

1—Barber-Colman Automatic Spooler No. 311 of 140 spindles, 1928.
Cheese cores, 2½" traverse, tridents, trucks, sleeves and beams.
1—Barber-Colman High Speed Warper No. 227, creel capacity 400 ends, 1928.
1—Barber-Colman Tailing Machine No. 93 of 10 spindles, 1928.
1—Spooler of 90 spindles, 4"x5" spools, Draper.
1—Spooler of 120 spindles, 4"x5" spools, Draper.
2—Spoolers of 140 spindles each, 4"x5" spools, Whitin.
1—Spooler of 120 spindles, 4"x5" spools, Saco & Pettee.
2—Warpers with Wooden V-creel for 450 spools, Draper.
2—Warpers, Lowell.
2—Warpers, Saco-Lowell.
4—Expansion Combs.
1—Dry Twister of 120 spindles, tape drive, 4 spool creel, 6" gauge, 4½" rings, single top and bottom rolls, 4"x5" spools, Ind. motor drive, 10 H. P., 550 volt, 1923, knee brakes, Saco-Lowell.

SLASHING AND TYING-IN

2—60" two-clinder, 5' and 7' dia. copper lined size boxes, expansion combs, positive driven cylinders, heat insulated heads, Tycos temperature controls on cylinders and size boxes, Cohoes, 1—1915, 1—1927.
1—60" two-cylinder Slasher (same as above, except no temperature controls), positive drive, single size boxes, Lowell, about 1913.
1—Size Kettle, 42"x42", with perforated coil, Tycos temperature control.
2—Size Kettles, 42"x42", with perforated coils, Tycos temperature controls.
1—2" Rotary Size Pump, Saco-Lowell.
1—Tying-in Machine No. 650, Size 4-E, 58", Barber-Colman, 1921.
1—Warp Drawing Machine No. 681, Style J-J, Barber-Colman, 1928, 58".
1—Warp Drawing Machine, Style S. S.-2, Barber-Colman, 1917, 48".

WEAVE ROOM NO. 1

144—40" Draper Model "E" looms equipped with Midget feelers, 2 harness double filling forks, Roper let off, worm take up, sliding 4-bar warp stop motion No. 17, two shift pick counters—Veeder, Roll tops for 2-harness, individual motor drive—550 volt, 3 phase, 60 cycle, ½ H. P., 7⅜" bobbin, Draper thread cutter No. 19, Order No. 5523, ½ rights and ½ lefts, 1929.
184—46" Draper Model E looms (same as above 40" looms), Order No. 5524, 1929.
92—48" Draper Model E looms (same as above 40" looms), Order No. 5525, 1929.

WEAVE ROOM NO. 2

240—40" Draper Model E looms, equipped with Midget feelers, double forks, 43½" reed, 2 bank stop, Roper let off Ratchet take up, Oscillating comb warp stop, one shift counter, belt drive (looms originally 40" single fork), about 1915, Draper thread cutters, Order No. 2717.
52—40" Draper Model E looms, same as above, worm take up, 1921, Order No. 4401.
20—36" Draper Model E looms, same as above, worm take up, 1920, Order No. 4229.

CLOTH ROOM

1—Hermas 4-knife shearing machine with rolling up head, 50" width, complete with exhaust fan, 1930, AF 1441.
1—Sewing and brushing unit, 50" width, consisting of:
  1—Curtis & Marble Railway Sewing Machine with Cloth Cradle, Singer head, motor drive.
  1—Curtis & Marble Scray with Nip Rolls.
  1—Curtis & Marble vertical brushing machine with 1 pair automatic guides, spreader roll, measuring roll, and calender rolling machine, 1928, 2 blades, 2 emerys, 2 brushes, set of Durant guides.
9—Curtis & Marble inspecting machines, 50" width with inclined tops and reversing motion, 1928-30.
1—Curtis & Marble Cloth Folder, 1-yard folds, 40" width, 1927.
1—Curtis & Marble Cloth Folder, 1-yard folds, 54" width, 1929.
2—Toggle joint Cloth Baling Presses, 1—1916, 1—1927, 1 motor, 1 belt.

AUXILIARY EQUIPMENT AND SUPPLIES

740—Lap Pins.
3—Lap Pin racks.
2—Fibre doffing trucks, 16"x29" and 16"x16".
161—Fibre trucks, 23½x36x24, 30x48x29, 18x42x24.
8—Canvas doffing trucks.
81—Wooden trucks, 23"x49", 18x40, 17x53.
8—Beam Dollies.
5—Warehouse Cotton Trucks.
2—Lap trucks.
25—Cloth trucks, staked, 29"x58".
31—Iron Head Warper beams.
Harness and Reeds, 12" heddles and cotton harnesses.
6500—Slubber bobbins, 13"x14", long.
22000—Intermediate bobbins, 11"x12" long.
120000—Speeder bobbins, 8½"x10".
1800—Slubber bobbin skewers.
12000—Intermediate bobbin skewers.
59000—Speeder bobbin skewers.
75000—Warp Spinning bobbins.
300000—Filling spinning bobbins, 3" ring, 6¾" traverse, 7¼" overall.
5000—4"x6" Metal clad Spooler and Twister spools.
1988—Fibre Roving Cans, 12"x36", metal tops, kick bands.

LABORATORY

1—Scott Yarn Tester No. 15, motor driven, 110 volts.
4—Brown & Sharpe Grain Scales.
1—Brown & Sharpe Roving Reel.
1—Brown & Sharpe Yarn Reel.
1—Armstrong Electric Oven, 17"x18"x18", 1 basket.
1—Palo Co. grain scale in mahogany cabinet.

SCALES

2—Howe Portable Platform Scales on casters, 31x44.
1—Howe Stationery platform beam scale, 13"x19".
2—Howe portable platform beam scales, 16"x24".
1—Toledo built-in floor dial scale, Style 921-V, 1000 lb. dial, 700 lb. beam.
1—Toledo platform type lap scale, Style 841-A.
1—Toledo lap scale.
1—Robidoux Cotton Scale, 700 lb. capacity.
2—Howe platform counter scales, 12"x18" platform.
1—Fairbanks platform counter scale, 12"x20".
1—Aldrich Regain Indicator.

STRIPPERS

1—Terrell single and quill stripper.
1—Terrell double and quill stripper.
1—Terrell bobbin cleaner, F407.
13—Work benches with one vise each, 4½" jaw.
4—Work benches without vises.
6—Folding ladders.
4—Straight ladders.
1—Economy portable hand power stacker, No. 7385.
Miscellaneous supplies in main supply room and small supply rooms in mill normally on inventory, including Card Room, Spinning Room and Weave Room supplies, also belting not on machines and shafting, new burlap, new wrapping paper, new paper cloth tubes, new slasher cloth. Stripping boxes and brushes.
4—Sets traverse card grinders and drum grinders.
1—Dronsfield card clothing machine.
1—Winch 200'—¾" wire cable.
6—Vises, 4" jaws.
1—Bradley circulator stencil machine.
1—Bradley horizontal stencil machine.
1—Guillet spinning frame levelling outfit.
1—Trimco pipe vise No. 42.
6—Oil Storage tanks with pumps, 24"x32".
2—Wall clocks.
3—Slasher hoods and exhaust piping, with 40" fan.
1—Banding machine.
Cotton conveyor and dust piping.
1—Hygrolit Yarn Conditioning Machine.
1—Economy Waste Baling Press 454F, width 30", length 54", depth 58", with G. E. motor, 3 H. P., 60 cycle, 18 R. P. M., 550 volts.
6—Grinnell unit heaters.

MACHINE SHOP

2—D. E. Whitin hand feed gear cutters, 1—1901, 1 about 1918.
1—Steptoe Shaper, 1901.
1—Emery Stand, 2 wheels.
1—Marvel power hack saw.
1—Barnes heavy duty drill press, 22".
1—Buffalo light duty drill press, 24".
1—Hamilton 24"12'—0" heavy duty Engine Lathe, 1901.
1—Hamilton 14"x5'—0" Engine Lathe, 1913.
1—Bench vise.
1—Electric drill, ½" Van Dorn.
Tools, drills, chucks.

CARPENTER SHOP

1—Hand operated drill press.
1—Crescent morticing machine.
1—Heavy duty vise.
1—Crescent 4"x17" planer.
1—18" saw table.
1—Grindstone.
1—36" Band Saw.
1—Yale & Towne 2 ton chain block.
4—Yale & Towne ½ ton chain blocks.

ROLLER SHOP

1—Burning down lathe.
1—Push on Machine.
1—Scarfer.
1—Evening roll.
1—Cement bar.

ELECTRICAL EQUIPMENT

Motors, mostly 550 volts, General Electric, and transformers.

Viscose Enlarging Plant

Parkersburg, W. Va.—Two separate units are now being built by The Viscose Company here. One is an acid reclaim plant, which will reclaim acid and sodium sulphate from the liquid baths used in the processing of rayon, while the second unit is a soda reclaim plant which cleanses the soda after it is used for pulp wash.

The acid reclamation plant was started last May and the actual building construction was completed three weeks ago. Considerable machinery and equipment already have been installed in the five-floor building, but it is not expected to be ready for operation until October 1st. The building is 76 feet high.

Work on the soda reclaim plant has been under way for only a short time but construction is progressing rapidly. The building will be 37 by 32 feet in size and will be three stories high. Numerous tanks and other equipment will be installed in the soda reclamation unit, with actual operation expected to get under way about January 1st.

Huge evaporators in the acid reclaim plant evaporate the water from the liquid wash through a vacuum principle.

When both units start operation, refuse wash which now is being emptied into the Little Kanawha river will be entirely eliminated, the mill officials said.

Mill Sale Confirmed

In orders signed by Judge R. Hunt Parker in Robeson Superior Court, K. M. Biggs, receiver of the National Cotton Mills of Lumberton, N. C., was authorized to make a deed for the property to Dudly Jennings and R. C. Adams, Jr., trustees for H. B. Jennings, J. E. Johnson, E. H. Evans, R. C. Adams, Pates Supply Co., J. W. Ward, Jr., David Townsend and W. Z. Pate, and to pay from the funds derived from the sale of the mill property the balance of $12,040 due on claims.

The Pates Supply Company, trustee, high bidder on the property at the fourth sale at auction on July 13th, reported to the court that it was acting as trustee for the parties named above and filed a transfer bid. The receiver asked permission of the court to transfer to the transferees. The money received from the sale added to a total of $31,737 for distribution to creditors and stockholders. After the claims of creditors are paid the receiver is to report the money remaining for distribution.

Index To Advertisers

Where a — appears opposite a name it indicates that the advertisement does not appear in this issue.

Page

—A—

Abbott Machine Co. —
Akron Belting Co. 41
Allis-Chalmers Mfg. Co. —
American Blower Corp. —
American Cyanamid & Chemical Corp. —
American Moistening Co. —
American Paper Tube Co. —
Armstrong Cork Products Co. 6
Arnold, Hoffman & Co., Inc. —
Ashworth Bros. 12

—B—

Bahnson Co. —
Baily, Joshua L. & Co. 44
Barber-Colman Co. 11
Borne, Scrymser Co. —
Brookmire, Inc. —
Brown, David Co. —
Brown, D. P. & Co. —
Bruce & Co., E. L. —

—C—

Campbell, John & Co. —
Carolina Refractories Co. 30
Charlotte Chemical Laboratories, Inc. —
Charlotte Leather Belting Co. 29
Chicago Mill & Lumber Co. 37
Ciba Co., Inc. —
Clark Publishing Co. —
Clinton Co. 22
Commercial Factors Corp. —
Corn Products Refining Co. —
Crompton & Knowles Loom Works —
Curran & Barry 44
Cutler, Roger W. —

—D—

Dary Ring Traveler Co. 40
Daughtry Sheet Metal Co. —
Deering, Milliken & Co., Inc. 44
DeWitt Hotels 41
Dillard Paper Co. 40
Dixon Lubricating Saddle Co. 35
Draper Corporation 21
Dronsfield Bros. 28
Dunkel & Co., Paul R. —
Dunning & Boschert Press Co. 45
DuPont de Nemours, E. I. & Co. 25

—E—

Eaton, Paul B. 37
Emmons Loom Harness Co. —
Engineering Sales Co. 30
Enka, American —

—F—

Foster Machine Co. 5
Benjamin Franklin Hotel —
Franklin Machine Co. —
Franklin Process Co. 15

—G—

Garland Mfg. Co. 35
General Dyestuff Corp. 4
General Electric Co. —
General Electric Vapor Lamp Co. 17
Georgia Webbing & Tape Co. —
Gill Leather Co. —
Gilmer Co., L. H. 3
Goodyear Tire & Rubber Co. —
Grasselli Chemical Co., The —
Graton & Knight Co. —
Greenville Belting Co. 37
Gulf Refining Co. —

—H—

H & B American Machine Co. —
Hercules Powder Co. —
Hermas Machine Co. —
Houghton, E. F. & Co. —
Houghton Wool Co. —
Howard Bros. Mfg. Co. 18

—J—

Jackson Lumber Co. 32
Jacobs, E. H. Mfg. Co., Inc. —
Johnson, Chas. B. —

—K—

Keever Starch Co. 14

—L—

Laurel Soap Mfg. Co., Inc. —
Lindley Nurseries, Inc. —
Link-Belt Co. —

—M—

Lowe Corp. 33
Maguire, John P. & Co. —
Manhattan Rubber Mfg. Div. of Raybestos Manhattan, Inc., The —
Marshall & Williams Mfg. Co. —
Mayview Manor —
Murray Laboratory —

—N—

National Aniline & Chemical Co., Inc. —
National Oil Products Co. —
National Ring Traveler Co. 42
Neisler Mills Co., Inc. —
N. Y. & N. J. Lubricant Co. —
Noone, Wm. R. & Co. —
Norlander Machine Co. —
Norma-Hoffmann Bearings Corp. 30

—O—

Old Dominion Box Co., Inc. —
Onyx Oil & Chemical Co. —
Orkin Exterminating Co. —

—P—

Parks-Cramer Co. 16
Perkins, B. F. & Son, Inc. —

—R—

Rhoads, J. E. & Sons —
Rice Dobby Chain Co. 45
Roy, B. S. & Son Co. —

—S—

Saco-Lowell Shops 19
Scholten's Chemische Fabrieken, W. A. Front Cover
Seydel Chemical Co. 38
Seydel-Woolley Co. 42
Sherwin-Williams Co. —
Signode Steel Strapping Co. —
Sipp-Eastwood Corp. —
Slip-Not Belting Corp. 36
Socony Vacuum Oil Co. Insert
Soluol Corp. —
Solvay Sales Corp. —
Sonoco Products —
Southern Ry. —
Southern Spindle & Flyer Co. 29
Staley Sales Corp. —
Stanley Works —
Steel Heddle Mfg. Co. 13
Stein, Hall & Co. —
Sterling Ring Traveler Co. —
Stevens, J. P. & Co., Inc. 44
Stewart Iron Works Co. —
Stone, Chas. H., Inc. —
Swan-Finch Oil Corp. —

—T—

Terrell Machine Co. —
Texas Co., The 2
Textile Banking Co. —
Textile Shop, The 36

—U—

U. S. Bobbin & Shuttle Co. —
U. S. Gutta Percha Paint Co. —
U. S. Ring Traveler Co. 39
Universal Winding Co. 24

—V—

Vanderbilt Hotel —
Veeder-Root, Inc. Back Cover
Victor Ring Traveler Co. —
Viscose Co. —
Vogel, Joseph A. Co. 40

—W—

Walker Electrical Co. —
Washburn Printing Co. —
Wellington, Sears Co. —
Whitin Machine Works 51
Whitinsville Spinning Ring Co. 35
Williams, I. B. & Sons —
Windle & Co., J. H. —
Wolf, Jacques & Co. —
Wytheville Woolen Mills 38

Cone Advances Ginghams

Cone Export & Commission Co. announced on Saturday an advance of ½c in denims to a basis of 13½c for the 28-inch 2.20s. This was the culmination of a week of very active trading in the denim market, during which this style, which previously had been traded down to 12¾c and in a few instances down to 12½c, moved up to the list basis of 13c and sold in very substantial quantities for last quarter deliveries. Other producers are expected to follow the Cone advance.

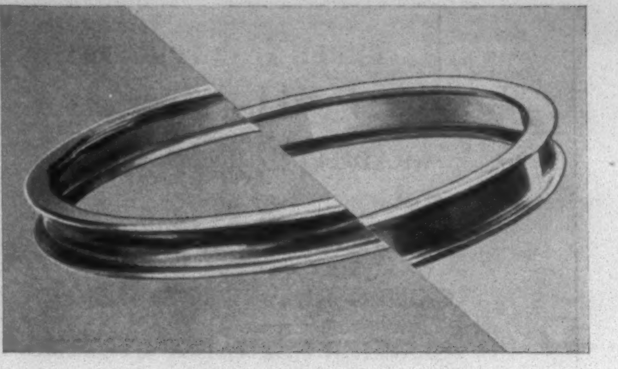
Textile Groups To Have Conference

Presidents and secretaries of the several regional, State and group organizations in the cotton textile industry will meet in New York Tuesday, October 27th, to effect closer liaison and co-ordination of effort in dealing with industry-wide problems, it was announced by Dr. Claudius T. Murchison, president of the Cotton-Textile Institute.

The conference, it was pointed out by Dr. Murchison, bringing together for the first time officially the principal executives of the organizations, assumes added importance in view of the fact that it is scheduled for the day before the tenth annual meeting of the Institute on October 28th, which, it is expected, will result in development of an aggressive program for protection and advancement of the industry's interests during the coming year.

Through the conference it is hoped to achieve a complete understanding of the relationship of the various organizations to each other and thus build a plan of cooperation which will not only increase the importance of each organization in its own sphere but will also insure the most effective mobilization of the industry's full power, without conflict of purpose or duplication of effort, behind activities of industry-wide interest.

Among those who will participate are Donald Comer, Sylacauga, Ala., president, and W. M. McLaurine, secretary-treasurer, Charlotte, N. C., of the American Cotton Manufacturers' Association; Frank I. Neild, New Bedford, Mass., president, and Russell T. Fisher, Boston, Mass., secretary-treasurer, of the National Association of Cotton Manufacturers; H. W. Moore, Concord, N. C., president, and Hunter Marshall, Jr., secretary-treasurer, of the Cotton Manufacturers' Association of North Carolina; S. M. Beattie, Greenville, S. C., president, and W. P. Jacobs, secretary-treasurer, of the Cotton Manufacturers' Association of South Carolina; W. N. Banks, Grantville, Ga., president, and T. M. Forbes, Atlanta, Ga., secretary, of the Cotton Manufacturers' Association of Georgia; T. Scott Roberts, Anniston, Ala., president of the Alabama Cotton Manufacturers' Association; W. H. Suttenfield, Statesville, N. C., president, Fred M. Allen, Gastonia, executive assistant, of the Southern Combed Yarn tonia, executive assistant ,of the Southern Combed Yarn Spinners' Association; W. S. Montgomery, Spartanburg, S. C., chairman of the Print Cloth Group; C. Whitney Dall, New York, president of the National Rayon Weavers' Association; Josef Pollack, New York, president, and David Snyder, secretary, the Cotton Thread Institute; and representatives, as yet unnamed, of the Fall River Cotton Manufacturers' Association, Fall River, Mass., and the Fine Cotton Goods Exchange, New Bedford, Mass.



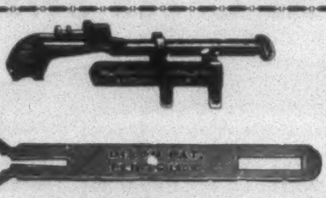
Are worn rings holding you back?

The samples we are receiving with orders indicate that many mills run their rings long after they have ceased to provide a proper bearing for the travelers. Look your rings over for wavy or narrow flanges. If they appear faulty, install one frame of new DIAMOND FINISH Rings and check the cash value of the improvement.

If travelers could talk, we wouldn't need to advertise rings.

WHITINSVILLE (MASS.)
SPINNING DIAMOND FINISH RING CO.
Makers of Spinning and Twister Rings since 1873

Southern Representative: H. ROSS BROCK, Lafayette, Georgia
Mid-West Representative: ALBERT R. BREEN, 2650 Coyne Street, Chicago



Dixon's Patent Reversible and Locking in Back Saddle with New Oiling Device three Saddles in one, also Dixon's Patent Round Head Stirrup.

Send for samples

DIXON LUBRICATING SADDLE CO.
Bristol, R. I.

GARLAND
LOOM PICKERS and
LOOM HARNESSES

GARLAND MFG CO.
SACO, ME.

Phone
Your
Orders
To
1006

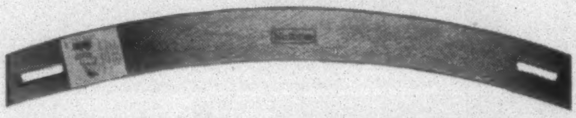
EXPERT COPPERSMITHS
SHeet Metal Specialists
GRADUATE ENGINEERS

SIZE KETTLES LINED
CARD SCREENS REBUILT
SLASHER EXHAUST SYSTEMS
DESIGN VENTILATING SYSTEMS
REBUILD PICKER SCREENS
SPINNING CYLINDERS REBUILT
COPPER LINED SIZE VATS

DUSTLESS OPENING ROOMS
REPAIRED—SLASHERS—RECOVERED
PNEUMATIC CONVEYOR PIPES
VACUUM SPOOLER CLEANERS

SPARTANBURG, SOUTH CAROLINA

Nuform Check Straps



Patent No. 1863271
July 14, 1932

Patent No. 1993531
March 5, 1935

WHEN YOU DECIDE TO

Nuform
THE STRAP THAT FITS THE STICK

BUY THE BEST BUY Nuform

Manufactured Only By

SLIP-NOT BELTING
CORPORATION

Kingsport, - - - - - Tennessee

State Laws On Child Labor Grow Stricter

Federal regulation of child labor is still a thing of the future—until at least a dozen more States approve the Constitutional Amendment—but individually the States are making their child labor laws more strict. According to a summary of child labor laws passed in 1936 which appears in the current issue of State Government, magabine of the council of State governments, five of the nine State legislatures meeting in regular session took steps to strengthen former labor statutes. A sixth—Louisiana—created a department of labor, placing under its direction the labor functions formerly administered by five different agencies.

Massachusetts broadened restrictions on night work for women to include girls under 21, and to cover all manufacturing and mechanical establishments. An investigation to determine in which occupations the minimum age of employables should be raised from 16 to 18 was authorized.

New York legislators decreed that minors under 18 must not be employed as workers or entertainers on premises used for the retail sale of alcoholic beverages. They also empowered city boards of education to require school attendance of unemployed children from 16 to 17.

Rhode Island Has 16-Year Limit

The Rhode Island General Assembly made it unlawful to hire a child under 16 to work in any manufacturing or mechanical establishment and restricted the employment of those under 16 in business or merchantile establishments to a 40-hour week and an 8-hour day within the hours of 6 a. m., to 6 p. m. Minors under 18 and women have been limited to a 48-hour week in manufacturing, mechanical, or mercantile establishments. Rhode Island's legislators also made 16 the compulsory school attendance age, eliminating the former exception allowing 15-year-olds to work if regularly employed. They provided too for an investigation, to be followed by directory orders, to establish minimum standards of working conditions for minors under 21 employed in trade and industry.

New South Carolina Law

South Carolina has a new department of labor under an act passed in the 1936 legislative session. It also declared that a 40-hour week with an 8-hour day would prevail for all workers in South Carolina cotton, rayon, silk, and woolen mills when and if Georgia and North Carolina adopt similar bills.

Virginia's General Assembly raised the minimum age for employment in certain hazardous occupations from 16 to 18 years of age.

No one of the six States passing child labor laws in 1936 has ratified the Federal Child Labor Amendment, which is an enabling provision that gives Congress power to pass Federal child labor legislation. Twenty-four States have so far approved this amendment, 18 within the past three years. Ratification by thirty-six States is needed to put the amendment into effect.—*Gastonia Gazette.*

Classified Department

WANTED—Position as Overseer of Cloth Room on napped goods, either plain or colored, or sheetings. 20 years' experience with nappers. Available immediately. Age 37. Reference furnished if desired. Answer "C. B. A.," care Textile Bulletin.

WANTED—Position as loom fixer, preferably somewhere in the South. 3 years' experience on Draper Model X Looms; also 2 years on Model L and K. 23 years of age, and could accept position within a week. Address "C-C," care Textile Bulletin.

WANTED—Soft drink and sandwich rights, known as "dope stand;" will purchase for cash your present business on a rental basis per week, or share profits with Church, baseball, or band. South Carolina preferred, with North Carolina second and Georgia third. Superintendent, write me your offer. "L. A. S.," care Textile Bulletin.

WANTED—Position as superintendent; 15 years' experience. Present employed but will change for better position. Best of references. "F. L.," care Textile Bulletin.

Paul B. Eaton
PATENT LAWYER
1408 Johnston Bldg., Charlotte, N. C.
514 Munsey Bldg., Washington, D. C.
Former Member Examining Corps
U. S. Patent Office

G. A. WHITE & CO., Sou. Rep.
International Moistening Co.
Jackson Moistening Co.
Foxboro Humidity Controls
Pumps, Compressor, Used Humidifiers
Box 533 Charlotte, N. C.

PLYWOOD BOXES
Used By Most Yarn Shippers
Chicago Mill & Lumber Co.
Charlotte, N. C.
614 Johnston Bldg. Phone 2-1075

Loans By RFC For Process Tax Repaid

Washington.—Cotton textile and other processors or distributors, who borrowed money from the Reconstruction Finance Corporation for the payment of processing taxes, have paid back their obligation in full, it was learned at the corporation's offices here. The loans, however, were relatively small, totalling $14,718. The names of firms obtaining and repaying the loans could not be obtained.

The figures were disclosed in connection with an RFC statement showing total RFC loan authorizations and repayments as of August 1st. It was reported that authorizations and commitments of the corporation to August 1st, including disbursements to other Government agencies and relief allocations, have been $11,308,722,497 during the recovery program. Of the total disbursements, it was reported, $6,230,164,766 was expended for activities of the corporation other than advances to governmental agencies and for relief. Of this latter sum approximately 67 per cent has been repaid.

A total of $3,300,000 has been advanced to the Secretary of Agriculture to purchase cotton, and all of this has been repaid. Loans to aid in financing the sale of agricultural surpluses in foreign markets totalled $20,224,586 and repayments amounted to $20,177,690. Advances to the Commodity Credit Corporation for farmers' cotton loans amounted to slightly over 454 million dollars and repayments slightly over 375 million dollars.

Loans to industrial and commercial businesses, including textile firms, amounted to $63,516,368 and repayments totalled $7,367,611, it was reported.

Argentine Cotton Acreage Estimate Shows Decline

Washington.—For the past five years the land cultivated to cotton in Argentina has been constantly on the increase, according to a report from Assistant Trade Commissioner Joe D. Walstrom, Buenos Aires, made public by the Commerce Department.

A revised estimate recently released by the National Cotton Board of Argentine places the acreage sown to cotton during the 1935-36 season at 317,019 hectares (approximately 783,354 acres), which is a decline of some 14 per cent from the earlier estimate of 368,000 hectares, the report states.

The principal reasons for the lower figure are given as the drought which was prevalent during the early part of the season in the province of Santa Fe, Santiago del Estero, Salta and Tucuman and the heavy rains and locust plagues experienced in the Chaco and Corrientes regions, Mr. Walstrom reported.

Total Argentine cotton acreage for the past five seasons has been: 1931-1932, 136,159 hectares; 1932-1933, 138,500 hectares; 1933-1934, 195,000 hectares; 1934-1935, 296,147 hectares; 1935-1936, 317,019 hectares. According to a census of the National Cotton Board, the current 1935-1936 crop has been grown on 25,929 farms with an average of 12.2 hectares each.

WPA To Open Bids On 6,163,500 Yds. Cotton Textiles Next Month

Washington.—The procurement division, Treasury Department, made known intentions to purchase 6,163,500 yards of cotton textiles for account of the Works Progress Administration, materials to be delivered to designated emergency relief workrooms throughout the United States.

It will be noted that deliveries on all bid invitations with the exception of 230-T are for on or before October 25th. In the case of the excepted bid invitation, which covers three lots of cotton flannel, delivery will be accepted on or before December 15th. The proposals follow:

230-T, delivery on or before December 15th, cotton flannel, 36-inch, 3.5 ounce, 2,502,800 yards, 30- or 32-inch, 1,993,100 yards and 27-inch, 504,100 yards.

231-T, huck toweling, 101,000 yards.

232-T, bleached terry towelling, 507,500 yards.

233-T, bleached pajama checks, 88x32, 555,000 yards.

The
Wytheville Woolen Mills, Inc.
Wytheville, Va.
Manufacturers of
SLASHER, CLEARER and ROLLER CLOTHS
Appreciates your business and solicits the continuance of same through the following authorized dealers:
CHARLOTTE SUPPLY CO., Charlotte, N. C.
MONTGOMERY & CRAWFORD CO., Inc., Spartanburg, S. C.
SULLIVAN HARDWARE CO., Anderson, S. C.
SOUTHERN BELTING CO., Atlanta, Ga.
RUSSELL A. SINGLETON, Jackson, Miss., and Dallas, Texas.
PROXIMITY MERCANTILE, Greensboro, N. C.

SEYDEL
The
House of Service
To North and South
Established 1904
Seydel Chemical Co.
Jersey City, N. J.
Greenville, S. C. Lowell, Mass.
Harold P. Goller Francis B. Boyer

FOR
QUICK
RESULTS!
Use This
WEEKLY
Journal
For Your
CLASSIFIED
ADVERTISEMENTS
Textile Bulletin
Offers You the Lowest Rates and the Largest
Circulation in the SOUTH

Japan's Cotton Textile Industry Surveyed

(*Continued from Page 14*)

The weaving industry employs 130,000 workers, and 75,000, or 90 per cent, of the factories have less than ten looms apiece. But since 1924 some 55,000 such small factories have ceased to exist.

Tiny Sweatshop Held Secret of Export Boom

"Plot the curve of Japan's trade volume" continues *Fortune,* analyzing the factors which have contributed to Japan's export boom, "and you will find that with never more than a 15 per cent fluctuation, one way or the other, it has been climbing steadily through wars and panics and depressions ever since 1900. Using a 1913 index of 100, it climbed to 117 in 1920, 167 in 1925, 191 in 1931, and it now stands at a mighty 245. And last year, while U. S. exports were going up 1.2 per cent in value and British exports 7.3 per cent, Japanese exports were leaping 17 per cent."

This remarkable Japanese efficiency has fooled a good part of the West, it is stated. The impression is common in the West that Japanese capitalism is really big business on the scale of U. S. or British enterprise. But the cold fact is that Japanese business isn't so big.

"What the West does not hear about," continues *Fortune,* "is Japan's teeming honeycomb of medium and small establishments. Consider the fact that of 5,000,000 industrial workers in Japan at the 1930, 2,200,000 wage earners worked for employers of fewer than five workers, another 1,000,000 worked for themselves, making a total of 3,200,000, or 64 per cent, of all industrial workers in 'factories' with less than five souls. There are unknown hundreds of thousands of little wooden factories-in-the-home where father, mother, sons, daughters, and perhaps an apprentice labor. Their costs drop to a level obtainable only by unremitting toil and negligible overhead. The quiet persistence of these people's toil, as well as the ceaseless whine of mass production, is under the resonance of the great industrial names. For these handmade products are largely contracted for by the trading companies of the great interests.

"The importance of these medium and small factories to the great interests is tremendous. These factories are important producers of Japan's cotton and silk fabrics, porcelain and earthenware, rubber goods, glassware, celluloid articles, dressed timber, woodware, provisions, enamelled iron ware, hosiery and bicycles. And if you are at all inclined to suppose that such articles are gewgaws without much industrial significance, observe that in 1932 these medium and small factories turned out 43 per cent of the total production of Japan. And between 1931 and 1933 they produced a smashing 65 per cent of Japan's total export volume.

"Today, in short, they are nothing less than the majority factor in Japan's great export boom."

Low Wages Another Factor

"But the cheapness of Japanese labor is a fact," the magazine continues. "The U. S. woman cotton spinner, for instance, averages about $2.50 per day, and the Japanese 26 cents. And it may be assumed that Japanese wages like these are an important if not the most important factor in the amazingly low export price structure of

Japan. But the plain fact is that no one has ever been able to show statistically the relationship between Japan's cheap labor and her astonishing export bargains. For Japan, a sound wage-price analysis does not exist. And this is not because such an analysis is always difficult to make, involving such other factors as working hours, exchange rates, manufacturing efficiency, etc. It is, because, for Japan, a sound wage-price analysis *cannot* exist. It cannot exist for the very good reason that a very important part of Japan's export goods are produced under working conditions which are unknown. They are produced by the 64 per cent of Japan's industrial workers who labor in 'factories' employing less than five souls. And theirs is an unknown way of life and labor, unexplored by cost accountants—and of the utmost significance in analyzing Japan's industrial successes."

JAPAN'S FACTORY LAW

"The fact is," according to *Fortune,* "that the Japanese Factory Law states that protected workers (males under sixteen and all females) shall not be employed between 10 p. m. and 4 a. m., that they shall not work more than eleven hours a day, that they shall have two days off a month, and so forth. But the factory law applies only to factories employing ten workers or more. It does not, in other words, apply to over two-thirds of the industrial workers in Japan—to some 3,400,000 industrially laboring souls. No statute so much as attempts to regulate their working conditions. And the ruling Japanese are not anxious to disturb this profitable status quo."

Pepperell Has Its Best Year

(*Continued from Page 18*)

PRAISES TAX CUT

"The past year furnished two very interesting changes in taxation, as affecting our plant in Fall River, Mass., and the plant in Biddeford, Me.

"The State of Massachusetts passed a law exempting machinery of manufacturing corporations from local taxes, and making it subject only to a State tax at the rate of $5 per thousand. As a result, the total taxes on our Fall River plant, including the State tax on the machinery, will amount to less than 25c per spindle. The officials of the City of Biddeford, Me., however, almost doubled an assessment of which the company was already complaining as being excessive and unfair. The new assessment results in a year tax amounting to over $2 per spindle on the Biddeford plant, or eight times as much per spindle as the Fall River tax. The company is protesting the Biddeford assessment, of course, and is seeking to obtain a fair and reasonable tax."

"If it is not successful, it will probably be necessary, in order to assure competitive costs of production, to liquidate the Biddeford property, or to move the equipment to a location more favorable for manufacturing. The company has been informed that a majority of the property owners of Biddeford are desirous that the company be given a substantially lower basis of taxation; but up to the date of the writing of this report efforts to obtain it have proved unavailing. No cotton textile company can operate on a competitive basis under a burden of local

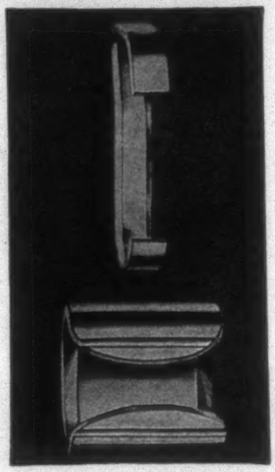
IT'S THE EDGE
—That Prevents Fly Waste and Split Ends

BEVEL

The swirling of the end in passing through the traveler produces smooth even yarn.

This in turn reduces the fly waste to a minimum in the Spinning and Twisting of Cotton, Wool, Worsted, and Asbestos, also reduces the number of split ends in the throwing of Real and Artificial Silks.

The Bowen Patented Bevel Edge
The Bowen Patented Vertical Offset
and
The Universal Standard Ring Travelers



EDGE

.... Are the result of combined research and experience in manufacturing Ring Travelers and backed by most modern mechanical equipment. It is to your advantage to try these travelers. Made in all sizes and weights to meet every ring traveler requirement.

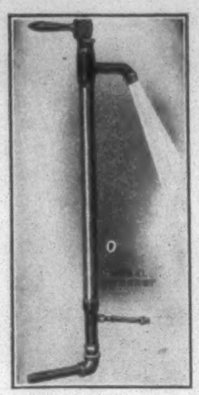
Write for Samples

U. S. Ring Traveler Co.
PROVIDENCE, R. I. GREENVILLE, S. C.
AMOS M. BOWEN, *President and Treasurer*
Sales Representatives
Wm. P. Vaughan
P. O. Box 792
Greenville, S. C.

T. L. Maynard
P. O. Box 456
Belmont, N. C.

Oliver B. Land
P. O. Box 158
Athens, Ga.

A Traveler for Every Fibre



A FROST-PROOF HYDRANT . . . for all year 'round service

THE VOGEL frost-proof hydrant assures an outside water supply winter and summer. When properly installed it will never freeze, and is so simple in construction that there is nothing to get out of order. This hydrant has been sold by plumbers everywhere for more than 25 years. The cost is so small you cannot afford to be without its convenience.

JOSEPH A. VOGEL COMPANY
WILMINGTON, DEL. ST. LOUIS, MO.

VOGEL PATENTED Products

IF IT'S PAPER
Send Us Your Order

Cloth Winding Boards
Jacquard Board—Beaming Paper
Toilet Tissues
Twines—Wrapping Paper—Boxes, etc.

DILLARD PAPER CO.
GREENSBORO, N.C. GREENVILLE, S.C.

DARY TRAVELERS

If it's a DARY Ring Traveler, you can depend on it that the high quality is guaranteed—that the weight and circle is always correct, and that all are uniformly tempered which insures even running spinning or twisting.

Ask for Prices

DARY RING TRAVELER COMPANY
311 Somerset Ave. Fred H. Dary, Mgr. Taunton, Mass.
Sou. Agents
JOHN E. HUMPHRIES
P. O. Box 343
Greenville, S. C.
CHAS. L. ASHLEY
P. O. Box 720
Atlanta, Ga.

taxation many times greater than in a neighboring State.

"New machinery and equipment have been added to the two Southern mills and the rayon divisions of the Fall River plant. The finishing plant at Lewiston has been further diversified with modern machinery. At Biddeford a considerable amount of machinery long idle and of no value has been junked.

"The remaining machinery is in good condition and consists of about 107,000 spindles. Two products—wide sheetings and blankets—comprise the output. We believe that, given reasonably competitive conditions, this plant should be able to hold its place with any other.

"Our present large volume of sales absorbs all of our working capital. As the management has no desire to borrow additional funds except for seasonal purposes, a small beginning has been made in the establishment of a commission business for the sale of products other than our own. This step was taken in order to make a fuller use of our large merchandising facilities."

PROFIT AND LOSS STATEMENT

Net sales		$29,640,764
Less—Manufacturing and general expenses	$27,174,278	
Taxes	622,210	
Inventory mark-down to market value	45,730	27,842,218
Operating profit		$1,798,545
Less—Depreciation	$460,029	
Interest paid	38,388	498,417
Federal income taxes		178,767
Net profit for year		$1,121,359
Surplus—June 30, 1935		8,193,315
		$9 314,675
Less—Dividends paid Aug. 15, 1935	$145,842	
Feb. 15, 1936	145,842	
Surplus—June 30, 1936		$9,022,991

Some Facts About Rayon

(Continued from Page 16)

ion to these methods of dulling the surface is that after a ew launderings the light scattering agent is gone.

The most effective luster control has resulted from the ayon manufacturer introducing appropriate light scattering materials directly into the spinning solution. In the beginning these were oils, waxes, and the like. Later norganic pigments, of which the best known is titanium oxide, were used. The du Pont Rayon Company developed a new organic compound never before produced on a commercial scale to give the particular type of luster represented by our Semi-Dull yarn. Rayons made in this way do not change appreciably because the delustering agents are distributed throughout the entire filament.

The complete story of luster control is more complex than has been represented here, but time prevents any more detail.

Another vital technical advance is seen in the production of finer and finer filaments. At the start the standard size of yarn contained only twelve individual filaments—that was the original coarse product referred to earlier. A few years later the same size yarn contained eighteen filaments, then twenty-four, then thirty, then forty, then sixty, then ninety, and currently as many as 150. Each increase in the number of filaments and decrease in their size has given the fabric designers an opportunity to make richer, finer, more luxurious fabrics. Today there are any number of beautiful fabrics made from rayon that cannot be duplicated with silk at any price. Besides the numerous style effects possible when used by itself, rayon supplements all the other fibers by the novel effects resulting when used in combination with them.

Rayon is a fine example of the way in which a synthetic product can excel the products of nature. Natural products must be taken where and as they are found and used in whatever ways can be developed based on their inherent properties. With a synthetic product, the list of desired characteristics can be written down and efforts directed toward their realization. We have already seen how strength, control of luster, and fineness of filaments were demanded and provided. Uniformity of filament size, of dyeing affinity, and many other properties can be cited.

Regenerated cellulose rayon takes the same types of dyes as cotton, but not always to the same degree. Fabrics containing both rayon and cotton may be put through a dyeing procedure and a two-toned effect obtained. Cellulose acetate rayon takes a different type of dye altogether. It is not affected by the dyes that dye viscose rayon or cotton and they, on the other hand, are not affected by acetate dyes.

Phenomenal Price Reduction

Many other technical advances have been reflected in rayon properties, but the ones just mentioned will illustrate. These quality improvements have been paralleled by price reductions that are really phenomenal. Before the war 150 denier viscose rayon sold for $2.00 per pound. During the war and just after, the peak price of $6.00 per pound was reached. By 1924 it was back to $2.00 per pound and then dropped to a low of $0.50 in 1933. More recently the price has been $0.57 per pound. Similarly the price of 150 denier acetate yarn has been lowered in ten years from $2.90 to $0.65 per pound. No unbiased person can doubt that the efforts of the rayon industry to improve quality and reduce the selling price have benefited the ultimate consumer and have contributed to a higher standard of living.

From 320,000 pounds in 1911 the production of rayon in this country has risen to 250,000,000 pounds! In 1926 it passed in volume the product it was intended to imitate (silk) and has continued to grow and may be expected to continue. It is proper to say in summary that under constant research and development its properties have been improved, its defects have been corrected, an dits cost has been reduced so that it has established itself no longer as a substitute for silk, but as a major textile fiber equally as useful as wool, silk, and cotton, filling a distinctive place of its own.

A POWER DOLLAR
SAVED IS A
PROFIT DOLLAR EARNED

CASCADE and SPIN TWIST brands of Leather Belting will help tremendously in accomplishing this much desired result.

WE SHIP QUICK

OUR GUARANTEE PROTECTS

The Akron Belting Company
Akron, Ohio

Greenville, S. C.
903-905 Woodside Bldg.

Memphis, Tenn.
20 Adams Ave.

Charlotte, N. C.
910 Johnston Bldg.

Dallas, Texas
221 Sunset Ave.

By Preference ☒
it's DeWITT OPERATED HOTELS · Genuinely Friendly
In Cleveland it's
☐ The HOLLENDEN
In Columbus it's
☐ The NEIL HOUSE
In Dayton it's
☐ The BILTMORE
In Akron it's
☐ The MAYFLOWER
In Toledo it's
☐ The NEW SECOR
In Savannah (Ga) it's
☐ The GEN'L OGLETHORPE
In Miami Beach it's
☐ The FLEETWOOD

DeWitt Operated Hotels
feature
Unusually Comfortable Rooms at Reasonable Rates, and the finest of Food and Beverages, Carefully Prepared and Served.

SEYCO

Seydel-Woolley Company

ATLANTA

Textile Chemicals For Best Weaving

A Company is Known by the Customers It Keeps

WENTWORTH

Double Duty Travelers

Last Longer, Make Stronger Yarn, Run Clear, Preserve the SPINNING RING. The greatest improvement entering the spinning room since the advent of the HIGH SPEED SPINDLE.

Manufactured only by the

National Ring Traveler Co.

Providence, R. I.

31 W. First Street, Charlotte, N. C.

NATIONAL RING TRAVELER CO. PROV. R. I. U.S.A.

Reg. U. S. P. O.

READY

THE NEW EDITION OF

CLARK'S DIRECTORY

Of Southern Textile Mills

Price $2.00

Complete—Accurate—Up-to-Date

Please Send Cash With Order to Save Bookkeeping

Clark Publishing Co.

CHARLOTTE, N. C.

Practical Cotton Carding

(*Continued from Page 10*)

day, others once.

The question of cleanliness should also receive the most serious consideration of the person in charge of the department. In an operation such as carding, the emission of fly is practically impossible to prevent, and it will lodge on all parts of the machine. It becomes necessary therefore to prevent choking of the parts and accumulation of dirt in places, where it will tend to cause most damage and the production of bad work, and the utmost vigilance should be observed in the keeping of everything free from such accumulations.—*Textile Weekly.*

Cotton Outlook Altered

(Journal of Commerce)

Yesterday's estimate of the American cotton crop of 11,121,000 bales issued by the Crop Reporting Board of the Department of Agriculture undoubtedly was the most sensational report in a great many years. The figure shows an almost unprecedented reduction from the board's estimate issued one month earlier. The cut of 1,380,000 bales from the August 8th figure of 12,481,000 is, so far as can be ascertained, the sharpest reduction which the board has shown in a four weeks' period. It is, by more than a half million bales, the widest change made in the last ten years over the August interval.

The estimate is of far-reaching importance to the cotton trade. In the first place, if this figure is a fair representation of the crop, and all signs at the moment would indicate that it is, it means that beyond any doubt production of American cotton is going to be less than consumption once again. Last season consumption of American was 12,600,000 bales. While there are doubts that consumption this year will reach the original 12,481,000-bale crop forecast, there is none, not even among the most bearish of foreign buyers of American cotton, who is currently venturing a consumption forecast that is not far in excess of yesterday's crop prediction.

Such a crop assures for the same reason a reduction in the 7,000,000-bale carryover as of July 31st, of which slightly over 3,000,000 bales are held by the Government. It offers the prospect that, starting February, if not sooner, the Government will be able to reduce these holdings without incurring losses. With a prospective consumption now exceeding the September estimate of the crop and a continuing free cotton market the world may very readily bid the price up to and over the level which would free Government holdings. Further, and indeed an important factor, the crop estimate would seem an assurance that Government loans against the new cotton crop will be unnecessary and need not be made.

The estimate itself already is being questioned in trade quarters. On big crops the Crop Reporting Board has cut 700,000 to 800,000 bales on two occasions over August, but it is difficult to conceive of August weather alone taking such a high percentage of the crop as the two estimates so far this year indicate. It must be apparent that the Government shot too high in August, even as it must be assumed that its current estimate is better than that of August 8th, if only on the ground that the crop is a month nearer completion.

The City of Charlotte and The Piedmont Carolinas Move Ahead

Our Future Progress Depends Upon What We All Do About It

Charlotte is proud of its neighboring towns and cities—when you move ahead we move ahead with you—your growth and progress are also our growth and progress. Let's all work together more than ever for the future growth of our section. Our greatest and most valuable resource or asset is first our people.

We have an abundance of raw materials. No one knows the full extent and variety of all our resources. With our raw materials, so varied and in such abundance barely touched—our soil, our climate, our location—Charlotte and the Piedmont Carolinas is really the land of opportunity for those seeking new locations.

Let us arise to the opportunity provided by our advantages and do our share, invite others to come in, and work and build with us. *We do treat newcomers fairly*, and work with them for their success.

Prosperity and happiness await those who come our way.

For information address:

The Charlotte Chamber of Commerce

Charlotte, N. C.

Center of The Piedmont Carolinas

"HELP YOUR TOWN AND THE CAROLINAS GROW"

SELLING AGENTS for
SOUTHERN COTTON GOODS

Deering, Milliken & Co.
Incorporated
79-83 Leonard St.
New York
99 Chauncey St., Boston 223 Jackson Blvd., Chicago

CURRAN & BARRY
320 Broadway
New York, N. Y.

Domestic Export
MERCHANDISING
Joshua L. Baily & Co.
10-12 Thomas St. New York

Equipment For Sale
?
Chances are you'll find a buyer through a
Textile Bulletin
WANT AD

Cotton Goods Markets

New York.—Very heavy trading developed in cotton goods immediately after the Government crop report last week. There were large sales of both gray and finished goods and prices advanced all along the line. Many buyers were slow to pay the advances but later came in for large supplies. Many mills have booked an excellent business through the remainder of the year. Offers to place contracts for delivery in the first quarter of next year were refused by a number of mills that were not willing to take such business at existing prices.

The 39-inch 4.75-yard 68x72s sold in large amounts at 7⅛c for October and forward deliveries through the end of the year, and September goods wer eheld at 7¼c, with good sales there. On the 39-inch 4-yard 80 squares, there was substantial trading for deliveries to the end of the year at 8⅛c, and while this figure still could be done at the close, many were asking 8¼c.

Sales of sheetings included large quantities of various constructions. Several houses found it difficult to meet wanted deliveries, despite the fact that buyers were taking long term contracts. Sales which ran into quantity included 40-inch 5.50s at 5⅜c and this style had moved up to 5½c at the close.

Broadcloths—The 80x60s sold early in the week at 6 9/16c and subsequently in moderate yardages at five-eighths; bids for more at nine-sixteenths were reported turned dow nduring the late afternoon. The 100x60s sold at 8c, quick and nearby.

Trading in fine goods showed some expansion during the day and a few houses reported very good contract business. Others found trading at best moderate. While prices were unchanged on the day on the majority of fine goods numbers, there were reports that advances were under consideration and it was believed likely that some of the combed lawns may move into new high ground in the next day or two.

Heavy sales were made of many kinds of colored goods for last quarter shipments, and not a few mills reported turning down bids for substantial amounts for January and forward deliveries.

Print cloths, 27-in., *4x60s	4⅜
Print cloths, 28-in., 64x60s	4½
Gray goods, 38½-in., 64x60s	6⅛
Gray goods, 39-in., 80x80s	8⅛
Gray goods, 39-in., 68x72s	7⅛
Brown sheetings, 3-yard	8¾
Brown sheetings, standard	9¼
Tickings, 8-ounce	16
Denims	13
Brown sheetings, 4-yard, 56-60s	7⅞
Dress ginghams	16
Staple ginghams	9

J. P. STEVENS & CO. Inc.
Selling Agents
40-46 Leonard St., New York

Cotton Yarn Markets

Philadelphia, Pa.—The yarn markets were confused over the crop report last week and were not adjusted to the new cotton situation before the week ended.

Some spinners were quoting 3 cents a pound higher while others indicated that they would accept business at 1 cent over prices of the preceding week. Quotations published in this market were regarded as nominal.

A great many yarn consumers are apparently very much concerned over the supplies for the first quarter in the coming year. There is a great deal of talk here of the likelihood of many spinners not being able to get adequate supplies of cotton suitable for their needs. Spinners are very bullish over the prices of cotton and yarn and most of them seem to feel that yarn quotations are going materially higher.

Some suppliers whose quotations were suspended immediately before issuance of the report, made new quotations about a cent and a half above what they were quoting a week ago. Veteran yarn men pointed out a month ago that August probably would show considerable deterioration in the cotton crop, but they failed to foresee such a wide reduction in the Government estimate. In such quarters it was said that probably further price adjustment would be necessary before the close of this week.

Others stressed the fact that while the indicated supply of cotton dropped about one and one-third million bales during August, demand for yarns and goods remained much more active than is customary in August. They argued that the cotton and yarn markets have yet to discount the combined influences of greater demand and reduced supply.

Forward buying on a greater scale than witnessed in the sale yarn markets since last fell is said by some sellers to have begun, as evidenced by the inquiries received, having to do wholly with 1937 deliveries. A good many small to medium sized orders came through for October and early November requirements. Dealers said it would take several days for spinners to adjust price ideas for the more removed deliveries.

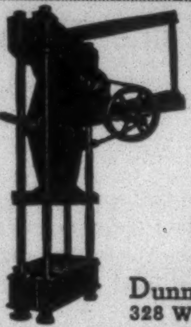
Columbia Alkali Enters Liquid Chlorine Field

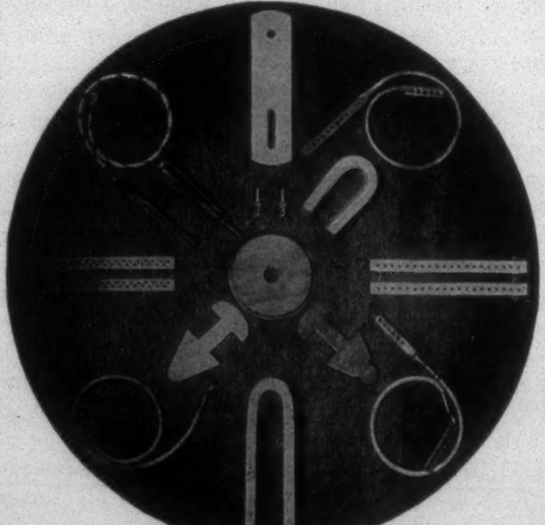
The Columbia Alkali Corporation, a wholly owned subsidiary of Pittsburgh Plate Glass Company, announces that liquid chlorine and electrolytic caustic soda have been added to the products of the company. A new and modernly equipped plant has been finished and shipments are now being made in single and multiple tank cars and in 100 and 150-pound cylinders. The new chlorine plant is located at Barberton, Ohio.

In making the announcement of the new plant and products, the company calls attention to the increasing importance of liquid chlorine in various industries. It is widely used in finishing many textile products.

Columbia Alkali Corporation, for almost 50 years, has been one of the leading producers of soda ash, caustic soda and by-products.

CRESPI, BAKER & CO.
Cotton Merchants
L. D. PHONE 997
Charlotte, N. C.
Eastern and Western Growth Cotton


BALING PRESS
Motor Drive, Silent Chain, Center of Screw.
Push Button Control—Reversing Switch with limit stops up and down.
Self contained. Set anywhere you can run a wire.
Our Catalogue sent on request will tell you more about them.
Dunning & Boschert Press Co., Inc.
328 West Water St. SYRACUSE, N. Y.

Rice Dobby Chain Co.

Millbury, Massachusetts

BULLETIN
Classified Ads
Bring Results at Low Cost
Make Your Wants Known Through
This Medium

Visiting The Mills

By Mrs. Ethel Thomas Dabbs (Aunt Becky)

SILER CITY, N. C.

Hadley-Peoples Mfg. Co.

This mill started up in 1895, with 1,000 spindles which were second hand, and built before the Confederate War. From this small beginning with old machinery, this plant has grown to 14,000 spindles, with all good and modern machinery.

When the mill started Siler City had a population of about 200. One brick building and a store housed all the business. Now the population is over 2,000, has a knitting mill, and furniture store, a nice hotel, splendid churches and schools, plenty of business houses and nice homes. Hadley-Peoples Manufacturing Company is largely responsible for the growth of the town and the success of various business enterprises.

An Unparalleled Record

We believe that this mill can boast of something that no other mill can. It has the same secretary and treasurer, the same superintendent and the same spinning room overseer that it started with 41 years ago. If any other mill can equal this record, we will be glad to have the information.

And the wonderful part of it all, the 41 years of continued service at one place, and on the same jobs, have not made these splendid men "sour on the works." They are all amazingly young in appearance, and are all alert, so friendly and courteous, that a visit here will not soon be forgotten.

J. C. Gregson is the genial secretary and treasurer; H. C. Robins, superintendent, and Wesley McMathews, overseer spinning. These three are the ones who have a service record for the entire life of the mill—41 years.

A picture of Mr. Robins was on the Personal Page last week.

Among the key men we met in the mill were: J. N. Light, overseer twisting; J. D. McLaughlin, overseer winding; G. C. Snider, section man in spinning, and L. M. Marley, overseer spinning on second shift.

OAKBORO, N. C.

Oakboro Cotton Mill is a live little yarn mill with more than 7,050 spindles. It runs two shifts of eight hours each and runs regularly.

J. A. Groves, of Albemarle, is president and treasurer; B. A. Simpson is secretary and is always on the job. B. M. Rogers is the genial and well liked superintendent.

C. A. Poplin is overseer carding and spinning on first shift and W. R. Eudy is in charge of second shift.

NEWBERRY, S. C.

W. M. Thomas, of Newberry, S. C., has a service record of over 40 years in Newberry Cotton Mills, and no man in the organization has given more loyal service. He is 75 years old, is hale and hearty, works every day, and is always at the gate an hour before it opens. To tell the plain honest truth, he is so afraid he'll be late, he rises at 4 o'clock, cooks breakfast and has it ready by the time the rest of the family wake up! Nobody can beat him making biscuit, and he is proud of his culinary accomplishments.

William Marshall Thomas

Will is an older brother of my first husband (Albert A. Thomas). His wife was formerly Miss Lou Burns, of Anson County, N. C. They have two children living, Mrs. James Taylor, a talented singer and pianist, and Grover Thomas, both of Newberry. Will is a devoted member of the Methodist Church, and seldom misses a service.

Miss Ethel Barton, beautiful entry of the Parker School District, Greenville, S. C., in the contest staged by the American Legion to select a State beauty queen.

Miss Barton is employed in the weaving department of the American Spinning Company. Her family has been living in this community for about 20 years. Her father works in the card room and three of her sisters are connected with the company.

HIGH FALLS, N. C.

I had never before seen this picturesque spot, which is between Hemp and Siler City, on Deep River.

Was sorry to miss seeing the manager and superintendent, J. M. Currie, who was away on business.

W. E. Woody, assistant superintendent, was one of the first operatives, and the only one of the first, now on the job. He is a very pleasant and interesting gentleman. He has helped to build three dams over the river; the first dam was for a sawmill, then a grist mill, and finally for the cotton mill, which started up in 1897—39 years ago. The last dam is concrete and built to "stay put."

A new power house is going up. The mill machinery is good, and the product is 8s, 10s and 12s single and ply yarns.

W. W. Husey is overseer carding and C. K. Upchurch is overseer of spinning.

Near the office is a lily pool, where water lillies thrive, and around it, other pretty flowers in bloom.

HENDERSON, N. C.

Harriett and Henderson Cotton Mills

There are three mills in Henderson, which is growing remarkably fast—in fact, it has "busted the buttons off its britches."

The mill office uptown, so long occupied by the officials, is moving out to give more room for business expansion, and will henceforth be in that big, commodious residence, in a big shady grove near and back of the Harriett Mills.

This big building is being worked over and remodeled to conform to office requirements and will be one of the nicest to be found.

The Coopers are a progressive bunch, and very likable. They are square and fair in their dealings and the operatives are settled and dependable.

There are two of the Harriett Cotton Mills, No. 1 and No. 2, and Henderson Cotton Mills.

Harriett Cotton Mills have 57,792 spindles and make yarns of various styles and numbers, on cones, skeins and tubes, single and ply, and warps.

Henderson Cotton Mills has 42,392 spindles and 132 looms. The product is hosiery yarns and sheeting.

The officials are: President, S. P. Cooper; secretary, J. A. Cooper; treasurer, J. B. Owen; general superintendent, Jno. D. Cooper, Jr.; superintendent of Harriett Cotton Mills, J. W. Cooper; superintendent Henderson Cotton Mills, J. H. Bunn.

We hope to show the picture of Superintendent J. H. Bunn soon.

Mr. J. H. Bunn has been here 35 years, starting as shipping clerk; he was promoted to the office of superintendent in 1910 and for 26 years has held that position honorably and efficiently.

His wife was formerly Miss Mattie Dean. One of his sons, Robert, is assistant superintendent, Harriett Cotton Mills. Another son, J. H. Bunn, Jr., is a graduate doctor, now serving as interne in Union Memorial Hospital at Baltimore. Dean, the youngest son, is in Annapolis Naval Academy and the one daughter, Margaret, will graduate from N. C. C. W. next spring.

Among the progressive key men in the Henderson Cotton Mill are G. A. Lowery, engineer, who has a service record of 40 years, and D. T. Clayton, overseer spinning, who has been here 38 years. Both are regular "fun incubators" and delight in joking with each other.

TROY, N. C.

D. D. Bruton is secretary and treasurer, also superintendent, of Smitherman Cotton Mills, Troy, and manager of Aileen Mills Co., Inc., Biscoe, N. C.

Mr. Bruton began his textile career in 1919, in the old Capelsie Mill at Troy. He is a Methodist and belongs to several fraternal orders—Masons, Junior Order and Woodmen of the World.

His wife was formerly Miss Sudie Wade, of Wadeville, a town named in honor of her father, W. T. Wade.

Southern Sources of Supply

For Equipment, Parts, Material, Service

Following are the addresses of Southern plants, warehouses, offices, and representatives of manufacturers of textile equipment and supplies who advertise regularly in TEXTILE BULLETIN. We realize that operating executives are frequently in urgent need of information service, equipment, parts and materials, and believe this guide will prove of real value to our subscribers.

ABBOTT MACHINE CO., Wilton, N. H. Sou. Agt., L. S. Ligon, Greenville, S. C.

AKRON BELTING CO., Akron, O. Sou. Branches, 209 Johnston Bldg., Charlotte, N. C.; 905 Woodside Bldg., Greenville, S. C.; 20 Adams Ave., Memphis, Tenn.

ALLIS-CHALMERS MFG. CO., Milwaukee, Wis. Sou. Sales Offices: Atlanta, Ga., Healey Bldg., Berrien Moore, Mgr.; Baltimore, Md., Lexington Bldg., A. T. Jacobson, Mgr.; Birmingham, Ala., Webb Crawford Bldg., John J. Greagan, Mgr.; Charlotte, N. C., Johnston Bldg., William Parker, Mgr.; Chattanooga, Tenn., Tennessee Electric Power Bldg., D. S. Kerr, Mgr.; Cincinnati, O., First National Bank Bldg., W. G. May, Mgr.; Dallas, Tex., Santa Fe Bldg., E. W. Burbank, Mgr.; Houston, Tex., Shell Bldg., K. P. Ribble, Mgr.; New Orleans, La., Canal Bank Bldg., F. W. Stevens, Mgr.; Richmond, Va., Electric Bldg., C. L. Crosby, Mgr.; St. Louis, Mo., Railway Exchange Bldg., C. L. Orth, Mgr.; San Antonio, Tex., Frost National Bank Bldg., Earl R. Hury, Mgr.; Tampa, Fla., 415 Hampton St., H. C. Flanagan, Mgr.; Tulsa, Okla., 18 North Guthrie St., D. M. McCargar, Mgr.; Washington, D. C., Southern Bldg., H. C. Hood, Mgr.

AMERICAN CYANAMID & CHEMICAL CORP., 30 Rockefeller Plaza, New York City. Sou. Office and Warehouse, 301 E. 7th St., Charlotte, N. C., Paul Haddock, Sou. Mgr.

AMERICAN ENKA CORP., 271 Church St., New York City. Sou. Rep., R. J. Mebane, Asheville, N. C.

AMERICAN MOISTENING CO., Providence, R. I. Southern plant, Charlotte, N. C.

AMERICAN PAPER TUBE CO., Woonsocket, R. I. Sou. Rep., Ernest F. Culbreath, P. O. Box 11, Charlotte, N. C.

ARMSTRONG CORK PRODUCTS CO. (Textile Division), Lancaster, Pa. Sou. Office, 33 Norwood Place, Greenville, S. C. T. L. Hill.

ARNOLD, HOFFMAN & CO., Inc., Providence, R. I. Frank W. Johnson, Sou. Mgr., Box 1268, Charlotte, N. C. Sou. Reps., Robert E. Buck, Box 904, Greenville, S. C.; Harold T. Buck, 1615 12th St., Columbus, Ga.; W. Chester Cobb, Hotel Russell Erskine, Huntsville, Ala.

ASHWORTH BROS., Inc., Charlotte, N. C. Sou. Offices, 44-A Norwood Place, Greenville, S. C.; 215 Central Ave., S.W., Atlanta, Ga.; Texas Rep., Textile Supply Co., Dallas, Tex.

ATLANTA HARNESS & REED MFG. CO., Atlanta, Ga. G. P. Carmichael, Atlanta Office; Alabama, Georgia and Mississippi Rep., Barney R. Cole, Atlanta Office; North Carolina and South Carolina Rep., Dave Jones, Greenville, S. C.

BAHNSON CO., THE, Winston-Salem, N. C. North and South Carolina Rep., S. C. Stimson, Winston-Salem, N. C. Sou. Rep., I. L. Brown, 886 Drewery St. N.E., Atlanta, Ga. Northern Rep., F. S. Frambach, 703 Embree Crescent, Westfield, N. J. Western Rep., D. D. Smith, 814 W. South St., Kalamazoo, Mich.

BANCROFT BELTING CO., Boston, Mass. Sou. Rep., Ernest F. Culbreath, P. O. Box 11, Charlotte, N. C.

BARBER-COLMAN CO., Rockford, Ill. Sou. Office, 31 W. McBee Ave., Greenville, S. C., J. H. Spencer, Mgr.

BORNE, SCRYMSER CO., 17 Battery Place, New York City. Sou. Mgr., H. L. Siever, P. O. Box 1169, Charlotte, N. C. Sales Reps., W. B. Uhler, 608 Palmetto St., Spartanburg, S. C.; R. C. Young, 1216 Kenilworth Ave., Charlotte, N. C.; John Ferguson, 303 Hill St., LaGrange, Ga.

BROWN CO., DAVID, Lawrence, Mass. Sou. Reps., Ralph Gossett, Woodside Bldg., Greenville, S. C.; William J. Moore, Woodside Bldg., Greenville, S. C.; Belton C. Plowden, Griffin, Ga.; Gastonia Mill Supply Co., Gastonia, N. C.; Russell A. Singleton, Dallas, Tex.; S. Frank Jones, 209 Johnston Bldg., Charlotte, N. C.

BROWN & CO., D. P., Philadelphia, Pa. Sou. Rep., N. W. Pyle, Box 834, Charlotte, N. C.

CAMPBELL & CO., JOHN, 75 Hudson St., New York City. Sou. Reps., M. L. Kirby, P. O. Box 432, West Point, Ga.; Mike A. Stough, P. O. Box 701, Charlotte, N. C.; A. Max Browning, Hillsboro, N. C.

CAROLINA REFRACTORIES CO., Hartsville, S. C.

CHARLOTTE CHEMICAL LABORATORIES, Inc., Charlotte, N. C.

CHARLOTTE LEATHER BELTING CO., Charlotte, N. C.

CHICAGO MILL & LUMBER CO., 614 Johnston Bldg., Charlotte, N. C. Sales Staff, E. J. Mueller, C. P. Semmlow. Executive Offices, 111 W. Washington St., Chicago, Ill. Plants at: Plymouth, N. C., Helena, Ark., Greenville, Miss., Tallulah, La., Chicago, Ill.

CIBA CO., Inc., Greenwich and Morton Sts., New York City. Sou. Offices and Warehouse, Charlotte, N. C.

CLINTON CO., Clinton, Iowa. Sou. Reps., Luther Knowles, Jr., P. O. Box 127, Charlotte, N. C.; T. LeRoy Smith, Box 654, Tel. 2-3921, Charlotte, N. C. Clinton Sales Co., Inc., Byrd Miller, Grady Gilbert, 2 Morgan Bldg., Greenville, S. C.; C. Lee Gilbert, 130 High Point Rd., Box 481, Spartanburg, S. C.; A. C. Boyd, 1071 Bellevue Drive N.E., Tel. Hem. 7055, Atlanta, Ga. Stocks carried at Carolina Transfer & Storage Co., Charlotte, N. C., Consolidated Brokerage Co., Greenville, S. C., Atlanta Service Warehouse Co., Atlanta, Ga.

COMMERCIAL FACTORS CORP., 2 Park Ave., New York City. Sou. Rep., T. Holt Haywood, Reynolds Bldg., Winston-Salem, N. C.

CORN PRODUCTS REFINING CO., 17 Battery Place, New York City. Corn Products Sales Co., Greenville, S. C., John R. White, Mgr.; Corn Products Sales Co., Montgomery Bldg., Spartanburg, S. C., J. Canty Alexander, Asst. Sou. Mgr.; Corn Products Sales Co. (Mill and Paper Starch Div.), Hurt Bldg., Atlanta, Ga., C. G. Stover, Mgr.; Corn Products Sales Co., 824-25 N. C. Bank Bldg., Greensboro, N. C., W. R. Joyner, Mgr.; Corn Products Sales Co., Comer Bldg., Birmingham, Ala., L. H. Kelley, Mgr. Stocks carried at convenient points.

CRESPI, BAKER & CO., 411½ S. Tryon St., Charlotte, N. C.

CROMPTON & KNOWLES LOOM WORKS, Worcester, Mass. Sou. Plant, Charlotte, N. C.

CUTLER, ROGER W., 141 Milk St., Boston, Mass. Sou. Agents: B. L. Stewart Roller Shop, Laurinburg, N. C.; Dixie Roller Shop, Rockingham, N. C.; A. J. Whittemore & Sons, Burlington, N. C.; The Georgia Roller Covering Co., Griffin, Ga.; Textile Roll Coverings Works, LaGrange, Ga.; East Point Roller Cov. Co., East Point, Ga.; Dixie Roll & Cot Co., Macon, Ga.; Morrow Roller Shop, Albemarle, N. C.; Peerless Roll Covering Co., Chattanooga, Tenn.; Textile Roll & Cot Co., Dallas, Tex.; Greenville Textile Supply Co., Greenville, S. C.; Anniston Roll Covering Co., Anniston, Ala.

DARY RING TRAVELER CO., Taunton, Mass. Sou. Rep., John E. Humphries, P. O. Box 843, Greenville, S. C.; Chas. L. Ashley, P. O. Box 720, Atlanta, Ga.

DAUGHTRY SHEET METAL CO., Charlotte, N. C.

DILLARD PAPER CO., Greensboro, N. C., Greenville, S. C. Sou. Reps., E. B. Spencer, Box 681, Charlotte, N. C.; Jess Caldwell, East Radford, Va.

DRAPER CORPORATION, Hopedale, Mass. Sou. Rep., E. N. Darrin, Vice-Pres.; Sou. Offices and Warehouses, 242 Forsyth St., S.W., Atlanta, Ga., W. M. Mitchell; Spartanburg, S. C., Clare H. Draper, Jr.

DUNKEL CO., PAUL A., 82 Wall St., New York City.

DU PONT DE NEMOURS & CO., Inc., E. I., Dyestuffs Div., Wilmington, Del. John L. Dabbs, Mgr.; D. C. Newman, Asst. Mgr.; E. P. Davidson, Asst. Mgr.—Technical. Sou. Warehouses, 302 W. First St., Charlotte, N. C. Reps., L. E. Green, H. B. Constable, W. R. Ivey, Charlotte Office; J. D. Sandridge, W. M. Hunt, 1031 Jefferson Standard Bldg., Greensboro, N. C.; B. R. Dabbs, John L. Dabbs, Jr., 715 Providence Bldg., Chattanooga, Tenn.; R. D. Sloan, Amanda Apt., Greenville, S. C.; J. M. Howard, 135 S. Spring St., Concord, N. C.; W. F. Crayton, Dimon Court Apt., Columbus, Ga.; J. A. Franklin, Augusta, Ga.; Tom Taylor, Newnan, Ga.

DU PONT DE NEMOURS & CO., Inc., E. I., The R. & H. Chemicals Dept., Wilmington, Del. R. M. Levy, Dist. Sales Mgr., 302 W. First St., Charlotte, N. C.

EATON, PAUL B., 213 Johnston Bldg., Charlotte, N. C.

EMMONS LOOM HARNESS CO., Lawrence, Mass. Sou. Rep., George F. Bahan, P. O. Box 581, Charlotte, N. C.

ENGINEERING SALES CO., 217 Builders' Bldg., Charlotte, N. C.; S. R. and V. G. Brookshire.

FAFNIR BEARING CO., New Britain, Conn. Sou. Reps., Stanley D. Berg, No. 321 N. Caswell Road, Charlotte, N. C.; A. G. Laughridge, No. 248 Spring St., N.W., Atlanta, Ga.

FRANKLIN MACHINE CO., 44 Cross St., Providence, R. I.

FRANKLIN PROCESS CO., Providence, R. I. Sou. Plants, Greenville, S. C., and Chattanooga, Tenn.

GENERAL COAL CO., 1019 Johnston Bldg., Charlotte, N. C. C. L. Rowe, Sou. Sales Mgr.; S. P. Hutchinson, Jr., Asst. Sou. Sales Mgr.; Reps., J. W. Lassiter, Grace American Bldg., Richmond, Va.; D. H. R. Wigg, Law Bldg., Norfolk, Va.; W. A. Counts, Law and Commerce Bldg., Bluefield, W. Va.; J. C. Borden, Greensboro, N. C.; H. C. Moshell, Charleston, S. C.; G. P. W. Black, Greenville, S. C.; F. W. Reagan, Asheville, N. C.; H. G. Thompson, Bristol, Tenn.

GENERAL DYESTUFF CORP., 230 Fifth Ave., New York City. Sou. Office and Warehouse, 1101 S. Blvd., Charlotte, N. C., B. A. Stigen, Mgr.

GENERAL ELECTRIC CO., Schenectady, N. Y. Sou. Sales Offices and Warehouses, Atlanta, Ga. E. H. Ginn, Dist. Mgr.; Charleston, W. Va., W. L. Alston, Mgr.; Charlotte, N. C., E. P. Coles, Mgr.; Dallas, Tex., L. T. Blaisdell, Dist. Mgr.; Houston, Tev., E. M Wise, W. O'Hara, Mgrs.; Oklahoma City, Okla., F. D. Hathway, B. F. Dunlap, Mgrs. Sou. Sales Offices, Birmingham, Ala., R. T. Brooke, Mgr.; Chattanooga, Tenn., W. O. McKinney, Mgr.; Ft. Worth, Tex., A. H. Keen, Mgr.; Knoxville, Tenn., A. B. Cox, Mgr.; Louisville, Ky., E. B. Myrick, Mgr.; Memphis, Tenn., G. O. McFarlane, Mgr.; Nashville, Tenn., J. H. Barksdale, Mgr.; New Orleans, La., B. Willard, Mgr.; Richmond, Va., J. W. Hicklin, Mgr.; San Antonio, Tex., I. A. Uhr, Mgr.; Sou. Service Shops, Atlanta, Ga.; W. J. Seibert, Mgr.; Dallas, Tex., W. F. Kaston, Mgr.; Houston, Tex., F. C. Bunker, Mgr.

GENERAL ELECTRIC VAPOR LAMP CO., Hoboken, N. J. Sou. Reps., Frank E. Keener, 187 Spring St., N.W., Atlanta, Ga.; C. N. Knapp, Commercial Bank Bldg., Charlotte, N. C.

GILL LEATHER CO., Salem, Mass. Sou. Reps., Russell A. Singleton, Dallas, Tex.; Belton C. Plowden, Griffin, Ga.; Ralph Gossett, Greenville, S. C.; Wm. J. Moore, Greenville, S. C.; W. J. Hamner, Gastonia, N. C.

GILMER CO., L. H., Tacony, Philadelphia, Pa. Sou. Factory Rep., William W. Conrad, Greenwood, S. C. Sou. Mill Supply Distributors: Alabama—Owens-Richards Co., Inc., Birmingham; Southern Bearing & Parts Co., Birmingham; Selma Foundry & Machine Co., Selma. Florida—Llewellwyn Machinery Corp., Miami; Harry P. Leu, Inc., Orlando; Johnston Engineering Corp., St. Petersburg; Southern Pump & Supply Co., Tampa. Georgia—Fulton Supply Co., Atlanta; Corbin Supply Co., Macon; Mill & Ship Supply Co., Savannah (formerly John D. Robinson Co. Mississippi—Soule Steam Feed Works, Meridian. North Carolina—McLeod Leather & Belting Co., Greensboro; Odell Mill Supply Co., Greensboro. South Carolina—Greenville Textile Supply Co., Greenville. Tennessee—Rogers-Bailey Hardware Co., Chattanooga; Browning Belting Co., Knoxville; J. E. Dilworth Co., Memphis; Nashville Machine & Supply Co., Nashville. Virginia—Todd Co., Inc., Norfolk; Smith-Courtney Co., Richmond; Johnston Electric Co., Staunton. West Virginia—Central Electric Repair Co., Fairmont.

GOODRICH CO., B. F., 4th and Brevard Sts., Charlotte, N. C. Atlanta Dist. Office, 376 Nelson St., S.W., Atlanta, Ga.

GOODYEAR TIRE & RUBBER CO., Inc., The, Akron, O. Sou. Reps., W. C. Killick, 205-207 E. 7th St., Charlotte, N. C.; P. B. Eckels, 141 N. Myrtle Ave., Jacksonville, Fla.; Boyd Arthur, 713-715 Linden Ave., Memphis, Tenn.; T. F. Stringer, 500-6 N. Carrollton Ave., New Orleans, La.; E. M. Champion, 709-11 Spring St., Shreveport, La.; Paul Stevens, 1609-11 First Ave., N. Birmingham, Ala.; B. S. Parker, Jr., Cor. W. Jackson and Oak Sts., Knoxville, Tenn.; E. W. Sanders, 209 E. Broadway, Louisville, Ky.; H. R. Zierach, 1225-31 W. Broad St., Richmond, Va.; J. C. Pye, 191-199 Marietta St., Atlanta, Ga.

GRASSELLI CHEMICAL CO., Cleveland, O. Sou. Office and Warehouse, 302 W. First St., Charlotte, N. C.

GRATON & KNIGHT CO., Worcester, Mass. Sales Reps., R. W. Davis, Graton & Knight Co., 313 Vine St., Philadelphia, Pa.; O. D. Landis, 1709 Springdale Ave., Charlotte, N. C.; P. T. Pinckney, Jr., 2360 Forrest Ave., Apt. 3, Memphis, Tenn.; H. L. Cook, Graton & Knight Co., 2615 Commerce St., Dallas, Tex. Jobbers: Young & Vann Supply Co., Birmingham, Ala.; McGowin-Lyons Hdwe. & Supply Co., Mobile, Ala.; C. C. Anderson, 301 Woodside Bldg. Annex, Greenville, S. C.; Cameron & Barkley Co., Charleston, S. C.; Cameron & Barkley Co., Jacksonville, Fla.; Cameron & Barkley Co., Miami, Fla.; Cameron & Barkley Co., Tampa, Fla.; Smith-Courtney Co., Richmond, Va.; Taylor-Parker, Inc., Norfolk, Va.; Battey Machinery Co., Rome, Ga.; Columbus Iron Works, Columbus, Ga.; Fulton Supply Co., Atlanta, Ga.; Dallas Belting Co., Dallas, Tex.; Textile Supply Co., Dallas, Tex.; Textile Mill Supply Co., Charlotte, N. C.; Keith-Simmons Co., Nashville, Tenn.; Lewis Supply Co., Memphis, Tenn.; Lewis Supply Co., Helena, Ark.; Southern Supply Co., Jackson, Tenn.; E. D. Morton & Co., Louisville, Ky.; Standard Supply & Hdwe. Co., New Orleans, La.

GREENVILLE BELTING CO., Greenville, S. C.

GREENSBORO LOOM REED CO., Box 1375, Greensboro, N. C. Phone Greensboro 5071 collect. Geo. A. McFetters, Pres. and Mgr.; Geo. H. Batchelor, sales manager.

GULF OIL CORPORATION OF PA., Successor to **GULF REFINING CO.**, Pittsburgh, Pa. Division Sales Offices: Atlanta, Ga.—A. W. Ripley, Greenville, S. C.; T. C. Scaffe, Spartanburg, S. C.; J. H. Hooten, Gastonia, N. C.; R. G. Burkhalter, Charlotte, N. C.; G. P. King, Jr., Augusta, Ga.; Boston, Mass.; New York, N. Y.; Philadelphia, Pa.; New Orleans, La.; Houston, Tex.; Louisville, Ky.; Toledo, O.

HART PRODUCTS CORP., 1440 Broadway, New York City. Sou. Reps., Samuel Lehrer, Box 234, Spartanburg, S. C.; Talley W. Piper, P. O. Box 534, Fairfax, Ala.; L. R. Unruh, P. O. Box 1602, Charlotte, N. C.

H & B AMERICAN MACHINE CO., Pawtucket, R. I. Sou. Offices, 815 The Citizens and Southern National Bank Bldg., Atlanta, Ga., J. C. Martin, Agt.; Johnston Bldg., Charlotte, N. C.; J. W. Rimmer, Mgr.; Fritz Zweifel, Fred Dickinson, Jim Miller, sales and service representatives.

HERCULES POWDER CO., Wilmington, Del. Sou. Reps., Chas. H. Stone, Charlotte, N. C.

HERMAS MACHINE CO., Hawthorne, N. J. Sou. Rep., Carolina Specialty Co., P. O. Box 520, Charlotte, N. C.

HOUGHTON & CO., E. F., 240 W. Somerset St., Philadelphia, Pa. Sou. Sales Mgr., W. H. Brinkley, 1410 First National Bank Bldg., Charlotte, N. C. Sou. Reps., Walter Andrews, 1306 Court Square Bldg., Baltimore, Md.; C. L. Elgert, 1306 Court Square Bldg., Baltimore, Md.; C. B. Kinney, 1410 First National Bank Bldg., Charlotte, N. C.; D. O. Wylie, 1410 First National Bank Bldg., Charlotte, N. C.; J. J. Reilly, 2855 Peachtree, Apt. No. 45, Atlanta, Ga.; James A. Brittain, 1526 Sutherland Place, Homewood, Birmingham, Ala.; J. W. Byrnes, 333 St. Charles St., New Orleans, La.; B. E. Dodd, 333 St. Charles St., New Orleans, La.

HOUGHTON WOOL CO., 253 Summer St., Boston, Mass. Sou. Rep., Jas. E. Taylor, P. O. Box 2084, Charlotte, N. C.

HOWARD BROS. MFG. CO., Worcester, Mass. Sou. Office and Plant, 244 Forsyth St., S.W., Atlanta, Ga., Guy L. Melchor, Mgr. Sou. Rep., Guy L. Melchor, Jr., Atlanta Office; S.W. Rep., Russell A. Singleton, Mail Route 5, Dallas, Tex.

JACOBS MFG. CO., E. H. Danielson, Conn. Sou. Rep., W. Irving Bullard, Pres., Charlotte, N. C. Mgr. Sou. Service Dept., S. B. Henderson, Greer, S. C.; Sou. Distributors, Odell Mill Supply Co., Greensboro, N. C.; Textile Mill Supply Co., and Charlotte Supply Co., Charlotte, N. C.; Gastonia Mill Supply Co., Gastonia, N. C.; Shelby Supply Co., Shelby, N. C.; Sullivan Hdw. Co., Anderson, S. C.; Montgomery & Crawford, Spartanburg, S. C.; Industrial Supply Co., Clinton, S. C.; Carolina Supply Co., Greenville, S. C.; Fulton Supply Co., Atlanta, Ga.; Southern Belting Co., Atlanta, Ga.; Greenville Textile Mill Supply Co., Greenville, S. C., and Atlanta, Ga.; Young & Vann Supply Co., Birmingham, Ala.; Waters-Garland Co., Louisville, Ky.

JACKSON LUMBER CO., Lockmart, Ala.

JOHNSON, CHAS. B., Paterson, N. J. Sou. Rep., Carolina Specialty Co., Charlotte, N. C.

KEEVER STARCH CO., Columbus, O. Sou. Office, 1200 Woodside Bldg., Greenville, S. C.; Daniel H. Wallace, Sou. Agt. Sou. Warehouses, Greenville, S. C., Charlotte, N. C., Burlington, N. C. Sou. Reps., Claude B. Iler, P. O. Box 1383, Greenville, S. C.; Luke J. Castile, 515 N. Church St., Charlotte, N. C.; F. M. Wallace, 1115 S. 26th St., Birmingham, Ala.

LAUREL SOAP MFG. CO., Inc., 2607 E. Tioga St., Philadelphia, Pa. Sou. Rep., A. Henry Gaede, P. O. Box 1083, Charlotte, N. C.

LINK-BELT CO., Philadelphia-Chicago, Indianapolis. Sou. Offices: Atlanta Plant, 1116 Murphy Ave., S.W., I. H. Barbee, Mgr.; Baltimore, 913 Lexington Bldg., H. D. Alexander; Dallas Warehouse, 413-15 Second Ave., E. C. Wendell, Mgr.; New Orleans, 747 Tchoupitoulas St.

MAGUIRE & CO., JOHN P., 370 Fourth Ave., New York City. Sou. Rep., Taylor R. Durham, First Nat'l. Bank Bldg., Charlotte, N. C.

MANHATTAN RUBBER MFG. DIV. OF RAYBESTOS-MANHATTAN, Inc., Passaic, N. J. Sou. Offices and Reps., The Manhattan Rubber Mfg. Div., 1108 N. Fifth Ave., Birmingham, Ala.; Alabama—Anniston, Anniston Hdw. Co.; Birmingham, Crandall Eng. Co. (Special Agent); Birmingham, Long-Lewis Hdw. Co.; Gadsden, Gadsden Hdw. Co.; Huntsville, Noojin Hdw. & Supply Co.; Tuscaloosa, Allen & Jemison Co.; Montgomery, Teague Hdw. Co. Florida—Jacksonville, Cameron & Barkley Co.; Miami, Cameron & Barkley Co.; Tampa, Cameron & Barkley Co. Georgia—Atlanta, Amer. Machinery Co.; Columbus, A. H. Watson (Special Agent); Macon, Bibb Supply Co.; Savannah, D. DeTreville (Special Agent). Kentucky—Ashland, Ben Williamson & Co.; Harlan, Kentucky Mine Supply Co.; Louisville, Graft-Pelle Co. North Carolina—Asheville, T. S. Morrison & Co.; Charlotte, Charlotte Supply Co.; Durham, Dillon Supply Co.; Elizabeth City Elizabeth City Iron Works & Supply Co.; Fayetteville, Huske Hdw. House; Goldsboro, Dewey Bros.; High Point, Kester Machinery Co., and Beeson Hdw. Co.; Lenoir, Bernhardt-Seagle Co.; Gastonia, Gastonia Belting Co.; Raleigh, Dillon Supply Co.; Wilmington, Wilmington Iron Works; Shelby, Shelby Supply Co.; Winston-Salem, Kester Machinery Co. South Carolina—Anderson, Sullivan Hdw. Co.; Charleston, Cameron & Barkley Co.; Clinton, Industrial Supply Co.; Columbia, Columbia Supply Co.; Greenville, Sullivan Hdw. Co.; Sumter, Sumter Machinery Co.; Spartanburg, Montgomery & Crawford. Tennessee—Chattanooga, Chattanooga Belting & Supply Co.; Johnson City, Summers Hdw. Co.; Knoxville, W. J. Savage Co.; Nashville, Buford Bros., Inc. Salesmen—E. H. Olney, 101 Gertrude St., Alta Vista Apts., Knoxville, Tenn.; C. P. Shook, Jr., 1031 N. 30th St., Birmingham, Ala.; B. C. Nabers, 2519 27th Place S., Birmingham, Ala.; R. T. Rutherford, 1318 Harding Place, Charlotte, N. C.

MURRAY LABORATORY, Greenville, S. C.

NATIONAL ANILINE & CHEMICAL CO., 40 Rector St., New York City. Sou. Office and Warehouse, 201 W. First St., Charlotte, N. C.; Julian T. Chase, Res. Mgr., Kenneth Mackenzie, Asst. to Res. Mgr. Sou. Reps., Dyer S. Moss, A. R. Akerstrom, W. L. Barker, C. E. Blakely, Frank L. Feazle, Charlotte Office; James I. White, Amer. Savings Bk. Bldg., Atlanta, Ga.; H. A. Rodgers, 1004 James Bldg., Chattanooga, Tenn.; J. H. Shuford, Harry L. Shinn, 932 Jefferson Standard Life Bldg., Greensboro, N. C.; E. L. Pemberton, 324 Dick St., Fayetteville, N. C.

NATIONAL OIL PRODUCTS CO., Harrison, N. J. Sou. Reps., R. B. MacIntyre, 801 E. Blvd., Charlotte, N. C.; G. H. Small, 799 Argonne Ave., N.E., Atlanta, Ga. Warehouse, Chattanooga, Tenn.

NATIONAL RING TRAVELER CO., 257 W. Exchange St., Providence, R. I. Sou. Office and Warehouse, 131 W. First St., Charlotte, N. C. Sou. Agt., C. D. Taylor, Gaffney, S. C. Sou. Reps., L. E. Taylor, Box 272, Atlanta, Ga.; Otto Pratt, Gaffney, S. C.; H. B. Askew, Box 272, Atlanta, Ga.

N. Y. & N. J. LUBRICANT CO., 292 Madison Ave., New York City. Sou. Office, 601 Kingston Ave., Charlotte, N. C., Lewis W. Thomason, Sou. Dist. Mgr. Sou. Warehouses, Charlotte, N. C., Spartanburg, S. C., Atlanta, Ga., Greenville, S. C.

NORLANDER MACHINE CO., New Bedford, Mass. Sou Plant, 213 W. Long St., Gastonia, N. C.

NORMA-HOFFMANN BEARINGS CORP., Stamford, Conn. Sou. Rep., E. W. Lawrence, 1841 Plaza, Charlotte, N. C.

ONYX OIL & CHEMICAL CO., Jersey City, N. J. Sou. Rep., Edwin W. Klumph, 1716 Garden Terrace, Charlotte, N. C.

PARKS-CRAMER CO., Plants at Fitchburg, Mass., and Charlotte, N. C. Atlanta Office, Bona Allen Bldg.

PLYMOUTH BOX & PANEL CO. Sales Office, 614 Johnston Bldg., Charlotte, N. C. Sales Staff, E. J. Mueller, C. P. Semmlow. Plant at Plymouth, N. C.

PERKINS & SON, Inc., B. F., Holyoke, Mass.

ROY & SONS, B. S., Worcester, Mass. Sou. Office, 21 Byrd Blvd., Greenville, S. C. John R. Roy, Representative.

SACO-LOWELL SHOPS, 147 Milk St., Boston, Mass. Sou. Office and Repair Depot, Charlotte, N. C., Walter W. Gayle, Sou. Agent; Branch Sou. Offices, Atlanta, Ga., John L. Graves, Mgr.; Greenville, S. C.

SEYDEL CHEMICAL CO., Jersey City, N. J. Sou. Rep., Harold P. Goller, Greenville, S. C.; Francis P. Boyer, Lowell, Mass.

SEYDEL-WOOLLEY CO., 748 Rice St., N.W., Atlanta, Ga.

SHERWIN-WILLIAMS CO., THE, Cleveland, O. Sou. Reps., E. H. Stegar, 212 W. First St., Charlotte, N. C.; R. B. Olney, 153 E. Main St., Spartanburg, S. C.; W. O. Masten, 2308 S. Main St., Winston-Salem, N. C.; J. K. Montague, 230 Bay View Blvd., Portsmouth, Va.; T. R. Moore, 509 Westover Ave., Roanoke, Va.; G. N. Jones, 207 Glascock St., Raleigh, N. C.; John Limbach, 233 Peachtree St., Atlanta, Ga.; D. S. Shimp, 3 Cummins Sta., Nashville, Tenn. Warehouses at Philadelphia, Charlotte, Spartanburg, Atlanta, Columbus, Nashville, Newark and Boston.

SCHOLTEN'S CHEMISCHE FABRIEKEN, W. A., Groningen, Holland. Sou. Rep., H. D. Meincke, 814 Commercial Bank Bldg., Charlotte, N. C.

SIGNODE STEEL STRAPPING CO., 2600-2620 N. Western Ave., Chicago, Ill. Sou. Warehouses and Offices, Greensboro, N. C., 908 Lakeview St., 'Phone 6935, O. B. Shelton, Rep.; Atlanta, Ga., 113 Courtland St., S.E., A. S. Stephens, Rep.; New Orleans, La., 700 Tchoupitoulas St., P. E. Odenhahl, Rep.

SIPP-EASTWOOD CORP., Paterson, N. J. Sou. Rep., Carolina Specialty Co., Charlotte, N. C.

SLIP-NOT BELTING CORP., Kingsport, Tenn.

SOCONY-VACUUM OIL CO., Inc., Southeastern Div. Office, 1602 Baltimore Trust Bldg., Baltimore, Md. Warehouses: Union Storage Warehouse Co., 1000 W. Morehead St., Charlotte, N. C.; Textile Warehouse Co., 511 Rhett St., Greenville, S. C.; South Atlantic Bonded Warehouse Co., Greensboro, N. C.; New South Express Lines, Columbia, S. C.; Terminal Storage Corp., 317 N. 17th St., Richmond, Va.; Taylor Transfer Co., 102 Boush St., Norfolk, Va.

SOLUOL CORP., 123 Georgia Ave., Providence, R. I. Sou. Rep., Eugene J. Adams, P. O. Box 329, Anderson, S. C.

SOLVAY SALES CORP., 40 Rector St., New York City. Sou. Distributors: Chas. H. Stone, Charlotte, N. C.; Miller-Lenfestey Supply Co., Tampa, Miami, and Jacksonvile, Fla. Sou. Rep., H. O. Pierce, 212 S. Tryon St., Charlotte, N. C.

SONOCO PRODUCTS CO., Hartsville, S. C.

SOUTHERN SPINDLE & FLYER CO., Charlotte, N. C.

STALEY MFG. CO., A. E., Decatur, Ill. Sou. Offices, 1710 Rhodes-Haverty Bldg., Atlanta, Ga., Wm. H. Randolph, Jr. Sou. Mgr. 812 Montgomery Bldg., Spartanburg, S. C., Geo. A. Dean. Reps., W. T. O'Steen, Greenville, S. C.; John A. Harris, Greensboro, N. C.; R. R. Berry, Atlanta, Ga.; H. A. Mitchell, Birmingham, Ala.

STANLEY WORKS, THE, New Britain, Conn. Sou. Office and Warehouse, 552 Murphy Ave., S.W., Atlanta, Ga., H. C. Jones, Mgr.; Sou. Rep., Corry Lynch, P. O. Box 1204, Charlotte, N. C.

STEEL HEDDLE MFG. CO., 2100 W. Allegheny Ave., Philadelphia, Pa. Sou. Office Plant, 621 E. McBee Ave., Greenville, S. C., H. E. Littlejohn and J. J. Kaufman, Jr., Vice-Pres. in charge of reed plant; Atlanta, Ga., H. Raiford Gaffney, 268 McDonough Blvd., Greensboro, N. C., C. W. Cain.

STEIN, HALL & CO., Inc., 285 Madison Ave., New York City. Sou. Office, Johnston Bldg., Charlotte, N. C., Ira L. Griffin, Mgr.

STERLING RING TRAVELER CO., 101 Lindsey St., Fall River, Mass. Sou. Rep., Geo. W. Walker, P. O. Box 78, Greenville, S. C.; D. J. Quillen, P. O. Box 443, Spartanburg, S. C.

STEWART IRON WORKS, Cincinnati, O. Sales Reps., Peterson-Stewart Fence Construction Co., 241 Liberty St., Spartanburg, S. C.; Fred C. Shaefer, West Point, Ga.; Ruff Hdw. Co., 1649 Main St., Columbia, S. C.; Lewis M. Clyburn, Box 388, Lancaster, S. C.; J. B. Hunt & Sons, Room 303 Odd Fellows Bldg., Raleigh, N. C.; Lewis L. Merritt, Odd Fellows Bldg., Wilmington, N. C.; Edwin C. Boyette, Jr., 1025 Arosa Ave., Charlotte, N. C.; John G. Webb, Hillsboro, N. C.; The Taylor Iron Works & Supply Co., 1014 Broadway, Macon, Ga.; D. E. Kehoe, 412 E. 40th St., Savannah, Ga. Complete sales and erection service available through all of our representatives.

STONE, CHAS. H., Inc., Stone Bldg., Charlotte, N. C., and Greenville, S. C.

TERRELL MACHINE CO., Charlotte, N. C. E. A. Terrell, Pres and Mgr.

TEXAS CO., THE, New York, N. Y. District Offices, Box 901, Norfolk, Va., and Box 1722, Atlanta, Ga. Bulk plants and warehouses in all principal cities. Lubrication Engineers, H. L. Marlow, W. H. Grose, J. C. Whitehurst, Charlotte, N. C.; P. H. Baker, Spartanburg, S. C.; D. L. Keys, Richmond, Va.

TEXTILE SHOP, THE, Franklin St., Spartanburg, S. C. E. J. Eaddy, Sec. and Treas.

UNIVERSAL WINDING CO., Providence, R. I. Sou. Offices, Charlotte, N. C., Atlanta, Ga.

U S BOBBIN & SHUTTLE CO., Manchester, N. H. Sou. Plants, Greenville, S. C.; Johnson City, Tenn., and Monticello, Ga. Sou. Reps., E. Rowell Holt, 1008 Johnston Bldg., Charlotte, N. C.; M. Ousley, P. O. Box 816, Greenville, S. C.; Chas. Sidney Jordan, Monticello, Ga., and L. K. Jordan, Sales Mgr., Monticello, Ga.

U. S. GUTTA PERCHA PAINT CO., Providence, R. I. Sou. Fac. Reps., J. S. Palmer, 1400-A Woodside Bldg., Greenville, S. C.; L. K. Palmer, P. O. Box 241, Birmingham, Ala.; William M. Moore, 601 Pearl St., Lynchburg, Va. Sou. Distributors Barreled Sunlight, D. A. Hines, 316 Twelfth St., Lynchburg, Va.; The Henry Walke Co., P. O. Box 1003, Norfolk, Va.; Bullington Paint Co., Inc., Fourth and Broad Sts., Richmond, Va.; Morgan's, Inc., 111 W. Broad St., Savannah, Ga.; Nelson Hdw. Co., 17 Campbell Ave., E. Roanoke, Va.; Atlantic Paint Co., 207 Meeting St., Charleston, S. C.; Pritchard Paint & Glass Co. of Asheville, 77 Patton Ave., Asheville, N. C.; Pritchard Paint & Glass Co., 12 W. 5th St., Charlotte, N. C.; Gate City Paint Co., 110 N. Greene St., Greensboro, N. C.; Montgomery & Crawford, Inc., Spartanburg, S. C.; Dobyns-Taylor Hdw. Co., Kingsport, Tenn.; Chapman Drug Co., 516 State St., Knoxville, Tenn.; The Eason-Morgan Co., 322 Second Ave., N., Nashville, Tenn.; Binswanger Co. of Tenn., 645-655 Union Ave., Memphis, Tenn.; G. & H. Paint & Glass Co., 1016 Broadway, Columbus, Ga.; The Hutchens Co., 100 S. Jefferson St., Huntsville, Ala.; Campbell Coal Co., 236-240 Marietta St., N.W., Atlanta, Ga.; Favrot Roofing & Supply Co., P. O. Box 116, Staton G, New Orleans, La.; Standard Bldg. Mt. Co., Inc., 230 31st St., Birmingham, Ala.; Shaw Paint & Wallpaper Co., Durham, N. C.; Vick Paint Co., 219 W. Fifth St., Winston-Salem, N. C.; Baldwin Supply Co., Bluefield, W. Va.; Baldwin Supply Co., Beckley, W. Va.; Southern Pine Lumber Co., 104 E. Main St., Clarksburg, W. Va.; Rhodes, Inc., 809 Cherry St., Chattanooga, Tenn.

U. S. RING TRAVELER CO., 159 Aborn St., Providence, R. I. Sou. Reps., William W. Vaughan, P. O. Box 792, Greenville, S. C.; Oliver B. Land, P. O. Box 158, Athens, Ga.

VEEDER-ROOT, Inc., Hartford, Conn. Sou. Office, Room 1401 Woodside Bldg., Greenville, S. C., Edwin Howard, Sou. Sales Mgr.

VICTOR RING TRAVELER CO., Providence, R. I., with Sou. office and stock room at 173 W. Franklin Ave., Gastonia, N. C. Also stock room in charge of B. F. Barnes, Jr., Mgr., 1733 Inverness Ave., N.E., Atlanta, Ga.

VISCOSE CO., Johnston Bldg., Charlotte, N. C., Harry L. Dalton, Mgr.

WHITIN MACHINE WORKS, Whitinsville, Mass. Sou Office, Whitin Bldg., Charlotte, N. C., W. H. Porcher and R. I. Dalton, Mgrs.; 1317 Healey Bldg., Atlanta, Ga. Sou. Reps., M. P. Thomas, Charlotte Office; I. D. Wingo and M. J. Bentley, Atlanta Office.

WHITINSVILLE SPINNING RING CO., Whitinsville, Mass. Sou. Rep., H. Ross Brock, Poinsett Hotel, Greenville, S. C.

WILLIAMS & SONS, I. B., Dover, N. H. Sales Reps., C. C. Withington, 710 Woodside Bldg., Greenville, S. C.; R. A. Brand, 203 Latta Arcade, Charlotte, N. C.; P. B. Raiford, 188 Washington Lane, Concord, N. C.

WINDLE & CO., J. H., 231 S. Main St., Providence, R. I.

WOLF, JACQUES & CO., Passaic, N. J. Sou. Reps., C. R. Bruning, 306 S. Chapman St., Greensboro, N. C.; G. W. Searell, Jefferson Apts., 501 E. 5th St., Chattanooga, Tenn.

WYTHEVILLE WOOLEN MILLS, Inc., Wytheville, Va. Sou. Reps., Charlotte Supply Co., Charlotte, N. C.; Montgomery & Crawford Co., Inc., Spartanburg, S. C.; Sullivan Hardware Co., Anderson, S. C.; Southern Belting Co., Atlanta, Ga.; Young & Vann, Birmingham, Ala.; James Supply Co., Chattanooga, Tenn.; Russell A. Singleton, Jackson, Miss., and Dallas, Tex.; Proximity Mercantile, Greensboro, N. C.

Autumn Textile Activity Gets Early-Season Start

Increasing demand for textile products resulted in extra-seasonal activity in this industry during July and August, according to the current summary of trade conditions contained in the *Rayon Organon*, published by the Textile Economics Bureau, Inc.

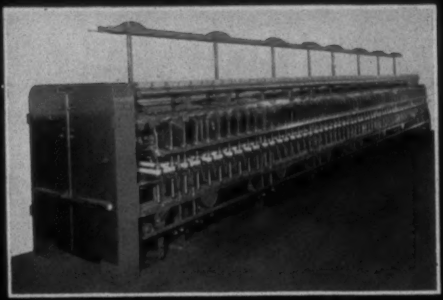
This July and August activity, it is stated, "represents an early-season start in the industry" and "correspondingly we do not expect that the industry can increase its activity from this point to the end of the year in such an amount as would be necessary to be in excess of normal seasonal expansion usually to be expected from this point forward."

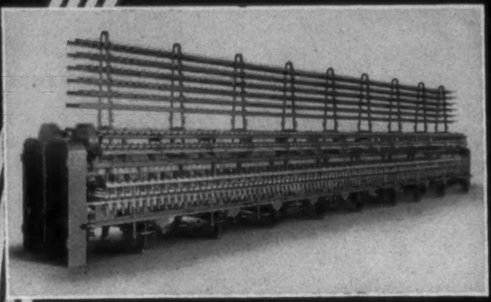
Rayon shipments to American mills during August established a new high record and again exceeded production, resulting in a drop in producers' stock on hand to the ridiculously low figure of 0.4 month's supply based on average monthly shipments during the past twelve months. Except for a few months in 1933, stocks have never been so low, relative to shipments, since figures were first compiled.

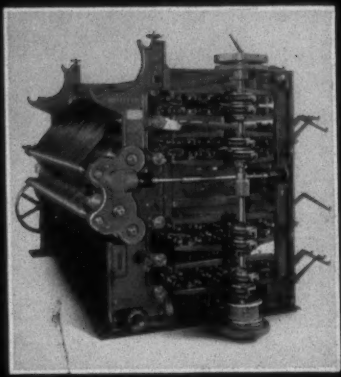
The August demand for rayon caused the non-acetate yarn deliveries index to rise to 633. The previous high index of this series was 614 in July. If staple fiber and acetate yarn deliveries were included, the August deliveries record would be even more impressive.

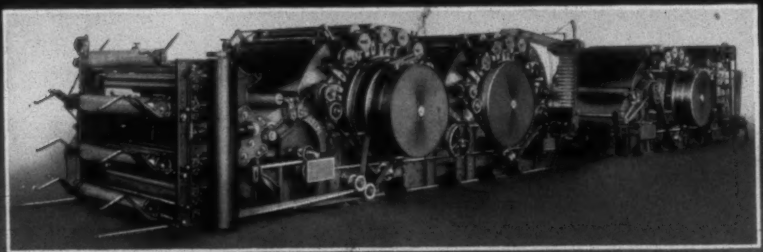
Foreign countries also are increasing rayon production at a rapid rate, according to the *Organon*. Great Britain's output for the first six months of 1936 totaled 72,200,000 pounds, an increase of 18 per cent over the 61,300,000 pounds produced in the corresponding 1935 period.

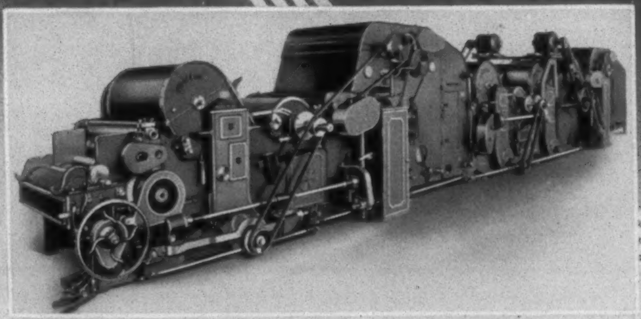
Japan's production for the first six months of 1936 aggregated 121,800,000 pounds in the corresponding 1935 period, a gain of 32 per cent.











Regardless of the outcome of the elections this Fall the textile industry will go forward. Mills will be busier than they have been for years. A demand for reconditioning and replacement of equipment will accompany this activity.

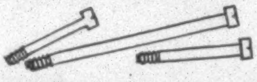
We are specialists over the broad range of equipment for processing Cotton, Woolen, Worsted, Rayon Silk and Waste Fibres. Bring your machinery problems to us.

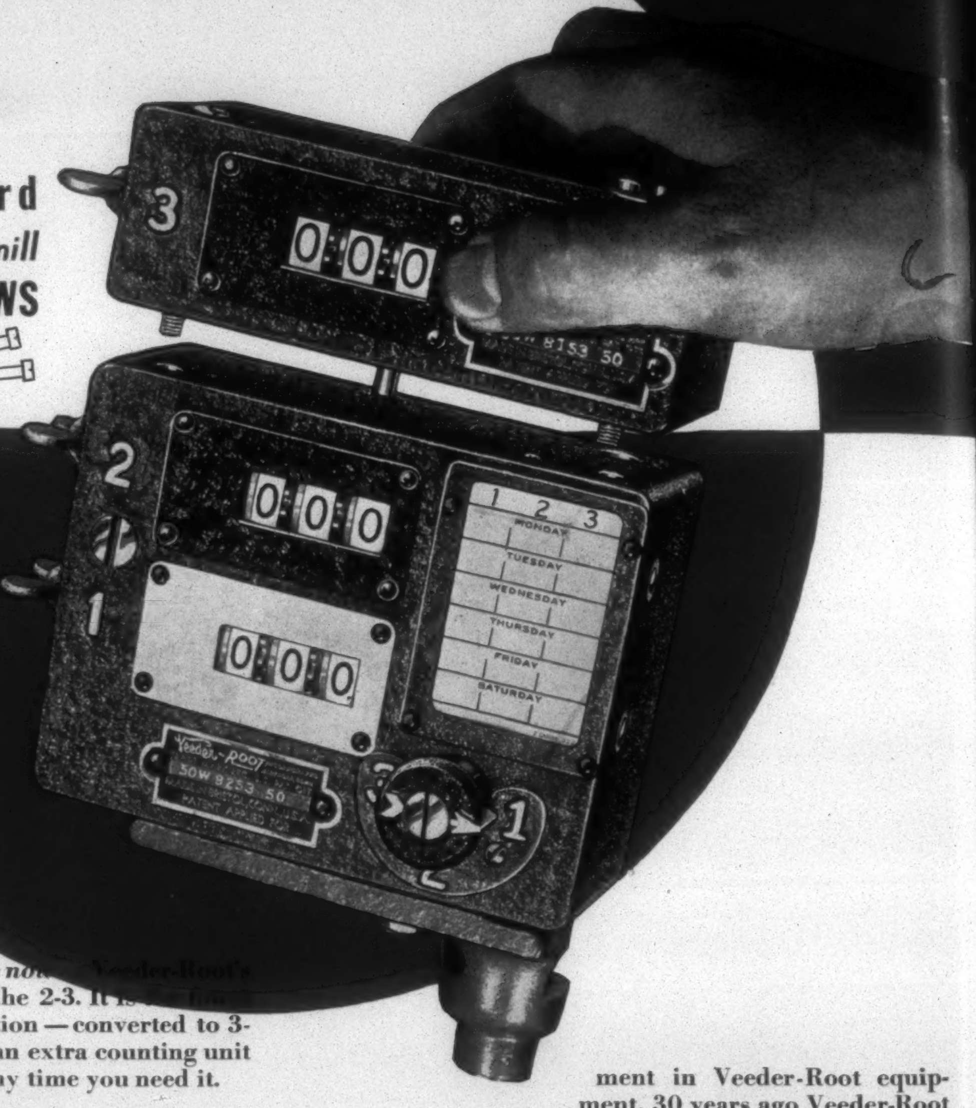
WHITIN MACHINE WORKS **WHITINSVILLE, MASS.**
CHARLOTTE, N. C. - ATLANTA, GA.

The New 2-3 . . .

Tomorrow's Pick Counter *Today*

ADD THE 3rd SHIFT *at your mill* **WITH 3 SCREWS**





The pick counter of the future is here *now* — Veeder-Root's newest pick counter achievement—the 2-3. It is [illegible] device obtainable for 2-shift operation — converted to 3-shift operation by simply attaching an extra counting unit with 3 screws—right in your mill any time you need it.

The 2-3 Pick Counter gives you protection against obsolescence. For this you pay very little because the combined cost of the 2-shift counter plus the 3rd shift unit is only slightly more than a complete three-shift counter bought as original equipment.

The 2-3 again demonstrates Veeder-Root's ability to make pick counters exactly to your needs—to protect your investment in Veeder-Root equipment. 30 years ago Veeder-Root designed, built and installed the *first* pick counters and Veeder-Root has made every important development and improvement in pick counters *ever since.*

Write your nearest Veeder-Root branch office for an immediate demonstration of the new 2-3 pick counter. See how easily it is converted from 2-shift to 3-shift operation. Learn first hand how much money it will save you.

VEEDER-ROOT, *Inc.*

HARTFORD, CONN. • BOSTON • PHILADELPHIA • MONTREAL • LONDON • **GREENVILLE, S. C.**

BUILDERS OF COUNTING DEVICES SINCE 1878